United States Court of Appeals

for the Second Circuit

APPENDIX

74-1498 ORIGINAL

In The

United States Court of Appeals

For The Second Circuit

KOPPERS COMPANY, INC., and UNIVERSAL CORRUGATED BOX MACHINERY CORPORATION,

Plaintiffs-Appellees,

vs.

S & S CORRUGATED PAPER MACHINERY CO., INC.,

Defendant-Appellant.

APPELLANT'S APPENDIX

Volume II, pp. 301a - end

OSTROLENK, FABER, GERB & SOFFEN
Attorneys for Defendant-Appellant
260 Madison Avenue
New York, New York 10016
(212) 685-8470

UNITED STATES COURT OF APPEALS
FILED
JUN 25 1974
J. DANIEL FUSARO, CLERK
RECEIVED

(7277) LUTZ APPELLATE PRINTERS, INC.
Law and Financial Printing

South River, N. J. (201) 257-6850 | New York, N. Y. (212) 565-6377 | Philadelphia, Pa. (215) 563-5587 | Washington, D. C. (202) 783-7288

PAGINATION AS IN ORIGINAL COPY

TABLE OF CONTENTS

Appendix

	Page
Docket Entries	1a
Complaint (Filed July 24, 1970)	5a
Answer and Counterclaim (Filed August 14, 1970)	14a
Plaintiffs' Reply to Defendant's Counterclaim (Filed October 13, 1970)	18a
Transcript of Proceedings February 6, 1973	20a
Transcript of Proceedings February 7, 1973	80a
Transcript of Proceedings February 8, 1973	245a
Transcript of Proceedings February 9, 1973	389a
Transcript of Proceedings February 13, 1973	488a
Judgment Order (Filed February 20, 1974)	606a
Opinion (Dated November 28, 1973)	609a

Contents

Page

WITNESSES

Don A. Fischer:
Direct 47a, 82a, 247a
Cross 285a

Wm. Francis Pulda:
Direct 84a
Cross 99a
Redirect 189a

Christopher Palli:
Direct 199a
Cross 219a

Edgar B. Lehman:
Direct 353a
Redirect 479a

Bernard J. Cantor:
Direct 492a
Cross 562a

Q In talking about that kind of oscillation, you are talking about, for instance, an AC type of sinusoidal waves; isn't that right?

A Yes. Originally, there were cranks. A crank. It's true of -- you know, we call it simple harmonic motion. It's true of a crank that the projection of a crank --

Q You're talking first electrically?

A No, mechanically--

Q Let's talk mechancially then.

A Yes.

Q Does a pendulum oscillate?

A Yes.

Q So that when the Examiner suggested reciprocating is a -- as another kind of word, would you say that one kind of motion includes the other as an engineer, and not as a dictionary specialist?

A No. To me reciprocating means going back and forth. And the reason I interpret it the way I did, I was using the word longitudinally ---

Q Yes.

A -- to help me.

Q Now, does a pendulum bob reciprocate?

A Pendulum reciprocate?

Q Pendulum bob. You know, the thing at the end?

A The thing at the end, I wouldn't say it does.

Q Do you know what is a foucault? Do you know what a foucault coil pendulum is?

A I probably know, but not by that exhibit name. You can tell me.

Q There are very few places in this world that have one. They are about forty or more feet long with a tremendous weight on the end. They usually have a point going into sand. And because of their inertia they do not change their direction because of the rotation of the earth. And that pointer marks sand as the earth in different radio lines -- as the earth rotates. Do you recognize it now?

A Yes. We built one for engineers day.

Q Why didn't you tell me?

Then a foucault pendulum, does it have a bob at the end of that forty foot cable of wire in reciprical movement?

A No.

MR. FABER: I'm just trying to separate the two days, your Honor.

THE COURT: Yes, I understand.

Q Now, the term "periodically pushing" -- that's the chapter heading for my next series of questions.

A Yes.

Q Now, taking the operation of one of the defendant's devices -- that's shown in Exhibit 3?

A Right.

Q Would the blanks coming from the folder at a regular speed, whether it's ten a minute or fifty a minute, or two hundred a minute or three hundred a minute, come in one after the other, does the pusher of the defendant operate periodically?

A Absolutely not.

Q All right.

Now, you tell us -- let me ask you this. Does it operate -- take the blanks coming at two hundred a minute coming from the folder. And they are coming regularly at two hundred a minute, and you want twenty-five blanks in each bundle. Can you predict that that pusher will operate regularly eight times a minute?

A No. Because that was called intermittent operation by the applicant, the applicant himself. The applicant said, on page 36 --

MR. FABER: Your Honor, may I ask that you remind this witness, as an expert he's here to answer questions.

THE COURT: Yes. Just -- the answer is no?

THE WITNESS: The answer is no.

MR. FABER: All right.

THE COURT: Don't volunteer anything else.

Q In other words, with this blank -- with these blanks coming in regularly at two hundred a minute, the operation of that pusher -- what is it? Eight times a minute, whatever sixty is divided by eight -- eight times a minute, rougly, every five and a half seconds is not predictable?

A Not predictable.

Q And standing there seeing the first pile come off, you will not be able to say that in five and a half -- whatever that number is -- eighth of a minute -- five and a half seconds, whatever it is, that another bundle will come off, you are not able to say so?

A No.

Q All right. Let's go to Chandler, which appears on No. 17 in the book.

Now, Figures 5, 6, 7 and 8 of Chandler were referred to you as showing a pusher?

A Right.

Q And the pusher pushes out from under a stack; right?

A Right.

Q All right. Then did Chandler have any straightening mechanism?

A Do you mean straightening the stack or straightening the single blank?

Q Straightening the single blank.

A It did not.

Q All right. Does Chandler show a pair of plates, one of which abuts the trailing edge of the blank in the stack and being periodically reciprocally movable in a longitudinal direction to apply a strengthening force to the blanks?

A No.

Q It's not in Chandler?

A No. I said it was intermittent in Chandler. That's what the applicant said, and that's what I say.

Q What is intermittent?

A Intermittent means that Chandler counted the blanks like the Universal and then ejected the blanks.

Q You are back on the pusher, and I am talking about a plate abutting the trailing edge of the blanks in the stack and being periodically reciprocally movable and in a longitudinal direction to apply a straightening force to the blank.

A Chandler doesn't have that.

Q All right. Now, does Chandler have any kind of push-off for the top of th stack?

A No. He pushes them off the bottom.

Q Now, does the claim in suit provide in any way that the pusher plate, which is mounted for limited vertical movement relative to the means for the support, require that the pusher plate consist of two plates, one slideable with respect to the other?

A Well, the claim does because the claim refers to the specification. And in the specifications, the support is in the form of a bracket or plates. So it has to be something like that. It can't be, for instance, the earth supports the whole machine. Well, you couldn't say that the -- that reads on that they are talking about the earth or the building.

Q And now, you were a patent attorney for about six, seven years, weren't you?

A Yes.

Q You never were an examiner in the Patent Office, were you?

A No.

Q And you drew claims, did you not?

A Yes.

(Continued on next page.)

Q And you understood claim drafting? Did you not understand claim drafting to require that you are permitted in each of the limitations to state them as broadly as possible, as long as the combination represented some novelty? Is that a fair statement?

A And as long as the combination wasn't shown in the prior art.

Q All right. You drew each limitation as broadly as you could and you were entitled to do so, were you not?

A Yes.

Q All right. So that -- and the purpose of that was so that you could obtain a reasonable range of protection for the inventor; isn't that right?

A The purpose -- that was a purpose so that I might get equivalence if I was entitled to them.

Q Exactly.

A Yes.

Q Now -- so that where in this limitation that the end of the claim do you see any requirement that the pusher plate be slidably mounted with respect to another plate right within the four corners of the claim?

A Well, it doesn't have to be slidably mounted, but it has to be mounted for limited vertical -- the term vertical appears -- vertical movement relative to the means for

supporting the pusher plates. So there has to be support for the pusher plates, which instead of a plate could be a grid or could be both or could be something like that. But it has to be mounted for limited vertical movements. And vertical movements means strictly up and down. And -- well, that should answer the question.

Q Well, I think I heard the answer to the question, but the first three words --

MR. FABER: May I have just have the beginning of the answer repeated and I will know whether to go on at this point.

(Record read.)

(continued next page)

(Record read.)

MR. FABER: If anyone wants it read in complete form it is all right with me.

THE COURT: No, that is all right.

Q Now, you further stated, I believe -- my notes say so, anyway -- that in the Exhibit 3 device no blanks whatever entered under the stack at the time the pusher operated on the top of the stack?

Is that a correct statement of whatyou said?

A Not quite. There could be the front of the blank. But there couldn't be more. At the very outside never more than one blank. There could be no blanks if blanks is understood to be plural.

Q But there could be a blank.

A Well, I don't believe so. I only believe maybe the front edge of a blank. And then I think it is very highly unlikely.

THE COURT: Is this while the pusher is operating?

THE WITNESS: While the pusher is operating. And it is very unlikely. I did not ever see one do it.

I made some measurements and calculations. And I do not think it could do it unless it was

a very unusual circumstance, but never, plural, blanks.

THE COURT: So it is not a constant feeder at that point?

THE WITNESS: That is right.

Q Did you actually have information as to the timing of the stroke of the pusher?

A The stroke of the pusher is roughly .25 seconds.

Q In one direction?

A Right.

Q And the return stroke?

A The return stroke I don't remember exactly. But it is lifted up so I didn't pay attention to that.

Q But the return stroke is inherently slower, isn't it?

A I don't know. It wouldn't be inherent, certainly.

Q Now, can you do some calculation --

A Certainly.

Q -- for me?

A Yes.

Q Well, before you do the calculation, I have been told that it is possible in the Universal device to feed the blanks at 300 blanks a minute.

Do you have that information as well?

A No, I have 200.

Q All right, take 200, then.

MR. FABER: I ask the attorney for the plaintiff to stipulate that the Universal machine is sold as having the capacity of 300 blanks a minute.

MR. WYATT: I can't stipulate because I don't know that that is so.

Q All right, do a calculation of 200 fifty-two inch blanks a minute coming into the stacker and tell me whether at least one blank enters the stack during that .25 second forward push that you have postulated --

A 200 a minute would be --

Q (Continuing) -- 52-inch blanks.

A (Continuing) -- would be three a second.

MR. WYATT: Wait a moment. Your Honor, I object to the question. I do not think there is anything in evidence that you can use 52-inch blanks on our Universal machines, Mr. Faber.

MR. FABER: Well, then the testimony of Mr. Pulda might have been incorrect in that the exhibit, the attached exhibit we used, to extend one of your exhibitsmight have been incorrect.

MR. WYATT: One of the problems is, I

think, the maximum press would be a 50-inch press which would limit the size of the blank to something below 50 inches.

THE COURT: And this is beyond 50.

MR. WYATT: Yes.

We will stipulate that the largest Universal press circumference is 50 inches. Now if you can go on from there -- I think the blank has to be smaller. I think 50 inches would be the maximum.

MR. FABER: Defense Exhibit C, which was testified to by Mr. Pulda, talks about a maximum box size of 55 inches wide and 53 inches deep for the machine of Plaintiff's Exhibit 5, which was the next generation following this.

THE COURT: Yes.

MR. FABER: So I think 52 inches is fair.

THE COURT: Except they say they do not have a machine that takes a 52-inch box. So what difference does it make?

MR. WYATT: Your Honor, I don't have this specific technical information. But I do know one thing and that is in the Universal device the maximum press circumference is 52 inches which means that the maximum box length that can

issue from that is 50 inches.

MR. FABER: All right, let him take 50.

THE COURT: Yes, 50, because I don't think you can go any further than that.

If they stipulate that is all they have then that is the end of it.

MR. FABER: Now, may I read something from the testimony of Mr. Theodore Ley, President of the company, where we asked him at Page 20 of his deposition:

"What is the fastest rate that Universal claims?

"We say as fast as the delivery machine can deliver. And there are machines that can deliver, say, 300 a minute."

I will come down to 50 inches for the blanks on Mr. Wyatt's say-so and I think I am entitled to 300 blanks a minute on the say-so of the president of the company.

Q Will you change your calculation to 50 blanks at 300 a minute?

MR. WYATT: I don't think he has enough information to make that calculation as it has been given him so far.

THE COURT: Well, let him answer that.

Do you have enough information to make the calculation?

What is he supposed to be calculating, anyway?

MR. FABER: How many blanks are going under that stack while the pusher is above the stack.

THE COURT: If it is 50 inches and going at 300 a minute.

MR. FABER: Yes, sir.

THE COURT: And that is where it is being pushed at the same time, so many being pushed off, and whether there is any being fed in underneath. I understand.

THE WITNESS: You have five a second. That is .2 seconds --

Q I am sorry. Will you please take a twenty-five cycle --

A I think you misunderstood. I said .20 seconds. Not cycles.

Q As the blank goes in every .2 seconds.

A Yes, .2 seconds.

Q And the pusher operates.

A Now, actually the travel of the cylinder is roughly about .16 seconds.

Q You said .25 before.

A That is for the whole travel. But remember --

THE COURT: Remember there is the pusher plate, too.

A (Continuing) Yes. There is two inches that is not on the top.

So that turns out to be .16 seconds that it takes the pneumatic thing to travel.

Now, one thing we haven't taken into account is the photocell trips it as soon as -- at the beginning of No. 25.

Now, that means that the cylinder starts and goes while the blank is still feeding in, while the last blank is still feeding in. So there is a space between that blank and the next blank which takes up some time.

(continued next page)

And by the time the new blank comes along that we are concerned with, the air cylinder has already pushed it over to the rollers that remove it.

Q I have taken a fifty inch blank. Now let's take something permitted by defendant's Exhibit C --

THE COURT: When we are talking about time here, we are talking about split seconds.

THE WITNESS: Right. We are talking about split seconds.

Q (Continuing) -- now, let's take a ten inch blank. Since Defendant's Exhibit C, the addendum to Plaintiffs' Exhibit 5, provides for ten inch wide and ten inch deep blanks, under those conditions during the time that the pusher is going forward, there will be a blank in that stack -- at least one blank entering the stack under the stack? Is that right?

A You see, the photocell trips always at the beginning edge of the blank so the air cylinder -- when that last blank is going in, that is going to be No. 25 -- that is going to make 25 at the top.

Now the photocell trips as soon as the leading edge passes the photocell. And that means that the air cylinder pushes then, and before you get the next -- pushes at that time -- and before you get the next blank in, the air

cylinder has pushed the stack into contact with the moving rollers and it is out of the way because it is lifted up and gone out of the way before the following blank gets in.

Q Do you know the distance from the photocell to the stack?

A I measured it on the machine now in Colorado. But I don't remember it. And I am sure that it is probably different on different installations. So I don't really have that accurately, no--

Q Was it more than twenty inches? Do you know?

A I think in Colorado -- I think it was around twenty inches, something like that.

Q And suppose I have blanks which are permitted by ten inches wide and ten inches deep, and now the photocell trips and the blank is moving along, will the pusher now operate while the blank is entering the stack?

A Well, while it trips the first blank, while it is entering the stack, the pusher can operate, but no other blanks come in.

Q I am talking about --

A That other blank doesn't come in.

Q I am talking about a blank which is less than the distance of the tripping -- has a length less than the difference between the photocell and the initial portion of

the stack, assume a blank ten inches, fifteen inches, will that blank enter under the stack while the pusher is operating above the stack?

A Well, the counted blank --

Q I was not talking about a counted blank. I talked about the one ahead of the counted blank, the one between the leading edge of the blank that is being counted and the one that is on its way to the stack.

A Well, I don't think I clearly understood the question.

Q All right. I will say it again.

You have got a distance between the counter and the stack we will assume of twenty inches and you have got a blank that is less than twenty inches long but you are still within the capacity of the machine, that blank has already been counted but is now between the counter and the stack, and along comes the next blank to be counted at the time -- if that is the twenty-fifth blank -- the pusher is activated. And that blank that is in between in on its way towards the stack.

Question: Is that blank entering the stack at the time the pusher is above the stack?

A Yes, I don't believe it is.

Q Now, let me ask you another question. The cylinder operates on air, doesn't it?

A Right.

Q It has a compressed air load on one side or is it loaded on both sides of the piston?

A Well, during the operation when it moves forward, it is loaded only on one side of the piston.

Q It is initially loaded on both sides of the piston, isn't it? Or is it?

A Well, what do you mean by "loading"?

Q It has got, say, forty pounds of pressure on one side of the piston and forty pounds of pressure on the other side of the piston.

MR. WYATT: I object to this question as being ambiguous. Mr. Faber is pointing to the prototype model and that doesn't have the piston underneath --

THE COURT: That is not the one we are talking about.

MR. FABER: That is well-taken.

Will you give me the blow-up of the next model?

THE COURT: That is the prototype, and that is where the problem arises because it has one cylinder --

MR. WYATT: That is the pusher cylinder.

THE COURT: The other one had an addition to it, a modification.

Q This air cylinder is not for the pusher?

A That is the pusher.

THE COURT: That is the one.

MR. FABER: That is all I am talking about.

THE COURT: That is the prototype, as I understand it. The other one is a modification. It has that cylinder plus another one that was added on. Am I right?

MR. WYATT: Yes, sir.

THE COURT: O.K.

MR. WYATT: Do you want me to help you, Mr. Faber?

THE COURT: Let him do it, and you stand over there (indicating).

Q Now, the pusher cylinder --

THE COURT: Yes, that is it.

Q -- in Plaintiffs' Exhibit 5 operates for pushing the pusher the same way as it did in Plaintiffs' Exhibit 3; isn't that right?

A That is right.

MR. FABER: So I wasn't trying to be cute about it, your Honor.

THE COURT: No, I know.

No, the only reason is I wanted to see it too because I know it was added on for some reason, I imagine the pivotal part of it. Right?

(Continued on next page.)

fols

BS/td
5/1

Q Is that pusher cylinder loaded with air on both sides of the piston when the pusher is at rest, do you know?

A You are talking about the pusher cylinder and not the lifter cylinder?

Q Exactly.

A All right. According to the gauges, when the piston--well, they move fast. Actually, there is pressure only on the pushing side during the operation. When it is retracted, there is pressure on the retracting side.

Q So for that cylinder to do the pushing job, the air pressure has to be admitted to that cylinder, sufficient pressure to get that pusher to get going, isn't that right?

A That's right.

Q And the operation of admitting that air pressure is under the control, I suppose, of some solenoid valve, which is triggered by the photocell; is that right?

A That's right.

Q So you have the inertia of the armature of the--not inertia of electricity, you know that is very fast, too fast, but we have the inertia of the solenoid valve and the inertia of the air that has come in there to drive the piston; isn't that right?

A Yes.

Q Do you have any time, since we are talking in .16 seconds and .25 seconds, do you have any knowledge of the actual time needed for that valve physically to open and for that air to come in with enough pressure to do the job -- do you know the exact time?

A I know the exact times under certain conditions, yes.

THE COURT: You are talking about the solenoid valve now?

MR. FABER: I am talking about the building of pressure.

THE COURT: Are you talking about the solenoid valve which controls it?

MR. FABER: Once you open a valve, the air comes in.

THE COURT: I understand that, that's what it is there for.

THE WITNESS: It can operate as low as a tenth of a second, the whole system, and could operate even faster if desired.

Q So within a tenth of a second to .26 seconds --

MR. WYATT: I object to the misstatement of the witness's testimony.

THE COURT: He is talking about the whole operation.

THE WITNESS: The whole operation can operate as fast as a tenth of a second.

Q You mean that piston?

A Yes.

Q With the air coming in?

A With the air coming in, with any lag that you are talking about in the solenoid systems.

Q What happened to the .16 seconds that you spoke about before?

A You are asking me now how fast it can operate, before you asked me how fast it does operate.

Q I didn't ask you how fast it could operate, you decided that I asked you that. I asked you if you knew how fast it actually operated?

A I gave you that figure, .25.

Q .25.

A Or in some cases, .125.

Q What are the --

THE COURT: We are not talking --

A --of a second.

Under some conditions .125, under other conditions .25.

THE COURT: He wants to know as far as this machine is concerned,,do you have an average

at which you say it would operate?

THE WITNESS: You want an average?

Q Yes.

A I would say .2.

Q That is .2 of a second between the leading edge of the blank passing the photocell and the pusher getting to the furthest end of its stroke, is that what you are saying?

A Right.

Q We left the question hanging. Assuming in 5A a blank that is less than the length between the photocell and the pusher, that blank has passed the photocell and sent its signal and that blank is on its way to the stack, and now another blank has come along and triggered the photocell while that first blank is on its way to the stack.

Under those circumstances, will that first blank on its way to the stack, enter the stack while the pusher is above the stack?

MR. WYATT: I object, your Honor. That question has been asked. It is the same question.

MR. FABER: I don't think it has. Otherwise I would not have wasted the Court's time.

THE COURT: I assume that the blank ahead of the one that is going to trip the photocell is the

last of the stack that is going to go up, or about 24th if there is a 24th stack, then the next would be 25 -- am I right?

I understand this. I know what we are talking about. I found out yesterday afternoon.

MR. WYATT: I withdraw the objection, your Honor.

MR. FABER: The trigger actuates the pusher and the pusher gets its information from the trigger.

THE COURT: And everything else stops working.

MR. FABER: The stack doesn't know anything, it just goes.

THE COURT: It's like everything else, it just goes along with the times. If the time goes wrong, it all stops.

MR. FABER: You are withdrawing the objection?

MR. WYATT: Yes.

MR. FABER: Do you remember the question?

THE WITNESS: No. Can I have it again?

THE COURT: The question is as that blank has passed the photocell and the next one now

trips it, what happens?

Is that right?

MR. FABER: Yes.

THE WITNESS: As the next one now trips it, the air cylinder has operated and has moved the top stack into contact with the rollers that pull them off.

Q He hasn't answered the question.

THE COURT: The problem in answering the question as far as he is concerned, is what number are you talking about going into the stack, 24, 25, 22, 23, if you have a 25 stack, you have to have a number.

Q I will rephrase it. The question is -- I am trying to say it the same way -- the leading edge of the blank has passed the photocell and it sends a signal to the pusher, and that is not the signal that makes the pusher operate, it is too early --

THE COURT: Right. I understand.

Q --that blank, having passed the photocell is on its way to the stack. Now, the next blank comes along and it happens to be the twenty fifth, so it says to the pusher "go" but this blank, the 24th is on its way to the stack.

Question: Is that blank going into the stack while the pusher is above the stack?

A We can figure -- you say 300 a minute? What spacing are you going to have between them?

Q The only assumption I have given you, 300 a minute -- I believe it's enough -- and blanks --

A I would --

MR. WYATT: I object to the question.

MR. FABER: I am not finished yet. Let me finish and then you can object.

Q The blanks are going in at three hundred a minute, and assume the blanks to be between 15 and 20 inches long, less than 20 inches long.

MR. FABER: Now you may object.

MR. WYATT: I object, unless the insertion of whether this is a 50 inch press is used here. If it is a 50 inch press and there is a ten inch blank, there is 40 inches between leading edges.

(Continued on next page.)

THE COURT: It is a question of traveling, is that right?

MR. WYATT: Yes. Unless he puts that in the question the question is ambiguous.

THE COURT: You are the engineer, why am I answering? I am using a little bit of common sense.

You have to have two points to start with and one is the question of traveling; then you can go on to the question of the stack. Without that I couldn't even figure it out, and I wouldn't know how, anyway. I know two and two is four.

I understand the question. He understands it now. Do you know the distance -- maybe we can straighten it out: Do you know the distance from after it has passed the photocell, the one that is not going to trip it, the one that's passed it, what distance must it travel, if you know, to get under that stack, and then the pusher to start?

THE WITNESS: He assumed twenty inches between the photocell --

THE COURT: Take his assumption.

THE WITNESS: Where is your other point?

Q And the entrance to the stack. I didn't assume it. You told me so, for one example.

A Okay. If you assume twenty inches, now the size of the blanks, we have to have it accurate.

Q 15 to 18, take any figure you like between them.

A Let's say 15. So there is 35 inches between blanks.

Q On the information that Mr. Wyatt gave you during his objection there is. I don't accept that. There are gap controls on these machines, and you know about them, don't you?

A On the conveyor -- on the box machines?

Q Yes.

A On the folding box machines?

Q Yes.

A Yes. I don't know their limitations, however.

THE COURT: We are not going to be concerned about that.

MR. FABER: We are going to be in our case.

THE COURT: We are going to be concerned with the feeder which folds the box and throws it underneath?

MR. FABER: When Mr. Wyatt tells you there are 40 inches between blanks and we know

there are gap controls on the folding machines to control the length of those gaps, then that is something for our case.

THE COURT: Would you say that the Court, then, has to consider whether or not that taken with the rest is an infringement; is that what you are telling me?

MR. FABER: This is an infringement. We have photographs that show it is.

THE COURT: I am talking about what is behind now, when the box comes open and the feeder in the back folds it up and throws it into this thing, are you telling me that I have to consider that, too?

MR. FABER: Absolutely not.

THE COURT: I didn't think so. I am really only concerned about the mechanism involved in this one as compared to the mechanism in yours, and whether or not there is an infringement on non-validity -- that's all I am concerned with.

MR. FABER: Our position is that the blanks in this machine and in every Universal machine under that stacker at the time that pusher

is riding above the stacker in a pushing direction -- I'm sorry to say Universal knows it. We are now going through a great deal of mental gymnastics to figure out ways why it is not so and I feel that we have our witness who knows the industry here and our expert here, and our expert has the qualifications of this expert and that's that.

THE COURT: I am as interested to listen to him as I am to listen to Mr. Fischer. I am almost certain that we will get divergent testimony. I don't expect two experts to say the same thing.

If a man has a broken leg, they never say it is broken in the same way.

MR. FABER: Mr. Fischer tends to go astray, he is given that forward fumble, that little bit of extra information saying, "Don't make that assumption."

THE COURT: Don't volunteer.

MR. FABER: No volunteering on the part of the attorney, either, and I promise not to volunteer when my witness is being cross-examined.

THE COURT: It doesn't affect my judgment

one bit, honestly. I say that very, very sincerely.

MR. FABER: May I just go on and see if we can move this case?

THE COURT: We have time before lunch.

MR. FABER: We covered Greenwood.

BY MR. FABER:

Q You talked about Ward. That is No. 19 in the exhibit 22 book. I think you said Ward shows an underfeed stacker; is that right?

A Yes, sir.

Q Does Ward show a straightening device? That is No. 19.

A Ward does not show a movable straightener. He uses the backstop and the side guides.

Q And bangs the box against it?

A So we can understand and don't -- each other, when you say straightener, you mean each blank, where there is alignment, you mean the whole stack?

Q That each blank is being straightened.

A No. Ward does not have that.

Q Does Ward show an across-the-top pusher?

A No.

Q We looked at Spiess a minute before, that is

No. 16 in your book?

A Right.

Q Does Spiess show an across-the-top pusher?

A No, it doesn't have an across-the-top pusher.

Q I show you Defendant's Exhibit E. Does Spiess show a machine that generally operates at the feed-out end very much like that of the defendant's Exhibit B?

A I couldn't tell that from this picture.

Q If you can't tell, that's that.

Have you ever seen machines of the Kekeffer Company?

A I may have.

Q You don't remember specifically, do you?

A I don't remember the names, no.

Q You referred to Hart as -- that is No. 4 in the book. You referred to Hart as an underfed stacker. Did you refer to it as an underfed stacker?

A Yes.

Q Are these heels fed in from the side of the stack?

A No, they are layers of leather cut out from the bottom of the stack, at the bottom of the stack and then they go up.

Q You mean the die comes up through the layers,

punches out the heel and pushes it up the chimney; is that right?

A That's one way of explaining it, yes.

Q Is it a correct way?

A Yes, it's okay.

Q And that is standard operation in die cutting, whether you go down through the material, leather or otherwise, into a flume, or fluke or flue, or up into a chimney; isn't that right?

A I wouldn't call it a chimney, I would just call it a channel.

Q All right. And then the top thing that pushes it off just tumbles the heels over on their side; is that right?

A No.

Q No? Tell me what that push-off operation is.

A Well, before it pushes there is a finger 56, you can see it in Figure 11, and you can also see it in Figure 9.

There is a finger, sort of a pointed finger 56 and it is above the corner of the stacked material.

In Figure 9 you can see above the corner. Then in Figure 11 it presses down on the corner and tilts them and then the shoe pushes the stack off.

Q So you have a kicker over for the heels into

another guide, and then you deliver them; is that right?

A Yes. There is a push -- well, the pusher 128 actually pushes them off.

Q You from your testimony regard this die cutting operation, feeding up into the channel, as an underfeeding?

A No, that wasn't my testimony.

Q Did you or did you not say it was an underfed stacker?

A I did not say -- it is an underfed stacker, but I did not say that in my testimony. I said that this was an example of removing from the top. The underfed stackers I gave were the other patents.

Q You say, however, now that this is an underfed stacker?

A I have not changed my testimony.

Q The answer is yes or no?

THE COURT: It is removed from the top?

THE WITNESS: It is removed from the top.

Q And it is an underfed stacker?

A It is.

THE COURT: He says both.

Q What kind of material -- Shepherd, No. 9 in the book, what kind of material does Shepherd feed?

A Shepherd is used -- it could be used for a coal loader.

Q He says specifically it is for feeding loose material such as coal, doesn't he?

A Right.

Q What material is Crank, No. 14 inthe book, used for?

A Crank is popcorn.

Q What does Jamieson-- No. 11 in the book -- what is it for?

A Jamieson was a patent cited by the Patent Office and it was -- those cages that go along that are used to scrape labels off of bottles. The Patent Office was -- I guess that's all you want me to say.

Q I want you to just tell me in answer to my question, what does Jamieson do?

A That's the answer.

Q Jamieson operates like a dredge, doesn't it?

A No.

THE COURT: A what?

MR. FABER: A dredge.

A No.

Q These bucket dredges that we use in our harbor here, don't they operate to pick up garbage the same

way as Jamieson?

A No.

Q Jamieson picks up garbage from the bottom of this wash tank, doesn't it, garbage happening to be labels?

A That's not what it does.

Q What does it do, what does it pick up?

A Well, the device is used as a label scraper, I mean, and then this picks up the labels that are at the bottom of the tank and it moves them around.

The Patent Office cites it to show that having something slide -- having the bucket 20 slide on the member 15, this showed the use of a slidable member. Actually, it doesn't slide like Crank, because the bottom is smooth; there is nothing that it hits at the bottom, whereas Crank moves up and down in response to something going -- something on the bottom.

(continued next page)

JB:GA
T6R1 AM

Q Well, there is something on the bottom of that wash tank? There are the labels --

A The labels, right.

Q Or the --

A Or picks them up.

Q Or anything else that might come off the wash bottle would be down there at the bottom of the tank; isn't that right? It would pick those up, too?

A Well, anything, whatever you -- whatever you're referring to, it would pick up anything that is there, right.

Q Yes. So when I called it a garbage remover, I am wrong?

A Yes.

Q All right. Now, in your prosecution of the patent which happened to be more than thirty years ago, did you have experience with rejections and allowances by the Examiner?

A Yes.

Q Wasn't then, and isn't now, the usual case of the rejection is based on two or three or four references used seriatim, sometimes five or six, but not more in the usual case?

A Yes.

Q All right. So don't you regard it as unusual that the Examiner had to come back again and again with other references in this case? I don't know the exact numb r. Thirteen or fourteen. Isn't that unusual?

A Did you say, isn't it unusual?

Q Yes, for an Examiner to do so?

A I don't think -- I don't think it's unusual.

Q You don't. All right. At the end of the patent in issue, there is a list of the references cited. Isn't that an extraordinarily long list?

A I wouldn't consider it extraordinarily long.

Q All right. That's your answer.

Now -- And do you know about the -- how often patent applications are rejected after they are initially filed, both today and at the time this patent was under prosecution?

MR. WYATT: I object to that question, your Honor. He hasn't established that this witness has that -- the statistics of the United States Patent Office at hand.

THE COURT: I don't know if he does or not.

THE WITNESS: I don't understand the question, first.

Q I guess you are a long way from patent practice

if you don't.

A No. I just finished one.

Q Now, two days ago -- I am just trying to pick up the other reference you spoke about, and not to be repetitive. You spoke about a reference, Evans, which is number 7 in the book provided by the Plaintiff. Now, I see you spoke about it today, as well.

A Yes.

Q What is the material that Evans operates on?

A It's a sheet piling method, sheet piling mechanism, particularly the means for Cole roll metal sheets.

Q I don't think you spoke about Hess, number 13, today. You did on Tuesday.

THE COURT: No, that was one of the --

Q You spoke about --

A I think I alluded to it very shortly.

THE COURT: The other day.

THE WITNESS: The other day, but not today.

Q When you say you alluded --

THE COURT: You weren't asked?

THE WITNESS: No.

MR. FABER: No.

Q What is that structure in the middle of, say, figure 4?

A The items that are being pushed off are billets, and they are coming up through a furnace. And they are being pushed off the top of a stack that is loaded from underneath.

Q Yes. These. So this is a furnace device for treating billets, I suppose, of metal; is that right?

A That's what the device is for. I was interested in the part that pushed off the billets.

Q Now, did I understand you to say -- I just want to get this clear -- that no combination of old elements can prevent a novel structure.

A I didn't say that.

Q Do you think the opposite is true, that it's possible for a completely novel structure to consist of a combination of old elements?

A When the combination achieves an unusual and unobvious result. You must use the word -- I don't like to use large words, but sometimes synergistic is a good word -- when the combination results in a synergistic result. In other words, when two plus two equals six, why, that sort of a result, then it would be novel.

Q So that in all of these references, taken individually, have you found all of the elements in any one of them, called for by the claim in suit?

A No. None of the --

Q All right.

A The operating elements are known in all in one particular reference.

Q And in order to do so, it was necessary for you to go to one of these and two of those and three of that patent; is that right?

A No.

Q I think we --- Of these 23 patents here, just to put it negatively, are there any that we haven't referred to? The 23 patents?

A I think so. We didn't look at all 23.

THE COURT: You didn't look at Savert, Blanket, Taylor, Hudson, Toteman.

MR. FABER: All right.

THE COURT: A whole group of them.

Q There were three or four that we haven't --

THE COURT: More.

MR. FABER: More?

THE COURT: Sure. Pacer.

MR. FABER: All right, let me do it positively.

THE COURT: Hess. Well, Hess, he did the other day, shortly. Cottman, Temple.

MR. FISCHER: Let me -- May I do it positively, and just list those -- Well, we will get it out of the testimony. I don't have to list them.

THE COURT: Sure. You will get it out of the testimony.

MR. FABER: All right. May I have two minutes?

THE COURT: That's just an indication that I am listening, without making notes.

MR. FABER: May I have --

THE COURT: I told you it would be proved eventually during the trial.

MR. FABER: May I have half of the two minutes remaining to talk to my people?

THE COURT: Yes. All right, I think we should recess now.

MR. FABER: I may be able to say something just before the recess. Let me talk to them for a minute.

THE COURT: All right.

MR. FABER: Your Honor, I may have a little bit more. May we have our recess now?

THE COURT: Yes.

MR. FABER: Thank you.

THE COURT: Absolutely.

All right, we will be back around 2:15.

I think we will probably exhaust the case today.

MR. WYATT: Fine, your Honor.

THE COURT: We are going along very nicely.

(Luncheon recess taken.)

of AM

BS:GA
T1R1 PM

AFTERNOON SESSION

4:20 o'clock P.M.

(Witness resumed the stand.)

MR. FABER: I have no further questions.

MR. WYATT: I have no redirect, your Honor.

THE COURT: Plaintiff rests?

MR. WYATT: One moment, your Honor, if I may before I rest.

(Witness excused.)

MR. WYATT: I would want to introduce three letters into evidence, your Honor. These are the letters that brought about this lawsuit, brought about by our declaratory judgment complaint.

As Plaintiff's Exhibit 24, a letter of June 4, 1969, to Universal Corrogated Box Machinery Company from Mr. Berliner, the Defendant's attorney.

MR. BERLINER: No objection.

THE CLERK: So marked.

(So marked.)

MR. WYATT: As Plaintiff's Exhibit 25, a letter from Mr. Berliner to Mr. Colvin, the attor-

ney for Universal. This letter is dated March 30, 1970, the same subject matter about infringement of the Defendant's patents, as Plaintiff's Exhibit 25.

THE CLERK: So marked.

(So marked.)

MR. BERLINER: No objection.

MR. WYATT: Finally, Your Honor, the last one is a letter dated June 17, 1970, from Mr. Berliner to a customer of the Plaintiff, Craft Corrugated, out in Portland, Oregon, charging them with infringement. We ask these be marked as Plaintiff's Exhibit 26, your Honor.

THE CLERK: So marked.

(So marked.)

MR. WYATT: We offer in evidence, your Honor, Plaintiffs Exhibit 24, 25 and 26.

MR. BERLINER: No objection.

THE CLERK: So marked in evidence.

(So marked.)

MR. WYATT: After that letter of June 17, 1970, in July we filed this declaratory judgment, your Honor. I believe we have offered, and all our Exhibits, 1 through 26, have been received

in evidence.

MR. FABER: If they have not been, let them be.

MR. WYATT: Thank you.

The Plaintiff rests, your Honor.

THE COURT: All right. Plaintiff rests.

Any motion by the Defendant, for the record at this time, or do you want to reserve?

MR. FABER: I reserve my motions.

May I have Mr. Berliner present the Defendant's case?

THE COURT: Surely.

MR. BERLINER: Your Honor, as a preliminary matter, in the summer of last year, Mr. Wyatt and one of the engineers for the Plaintiff were shown some films. These films were taken by someone who is not in Court, but I was present at the time they were taken, and we would like to introduce the film into evidence, together with five enlargements of selected frames.

MR. WYATT: Your Honor, we object to that. What they have attempted to show is that this is an underfeed. Unless they present evidence as to the speed of the machine, and the operator who

was operating it, what conditions it was operated under, we object to that evidence being introduced, your Honor, as hearsay.

THE COURT: We will mark it for identification at this time, and I will reserve on it subject to connection.

MR. BERLINER: I can bring the witness in who actually took the pictures.

MR. WYATT: If you represent what he will say, maybe I will withdraw the objection.

THE COURT: What will he testify?

MR. BERLINER: I would represent that he would say that these pictures were taken at the Weston Craft Plant in Bellmar, New Jersey. They were taken of a Universal Underfeed Stacker, which at the time had a lifting cylinder, and it was subsequently changed to a ramp-type lifting device on the pusher.

I believe the witness will say that the speed of operation was approximately 180 boxes a minute.

MR. WYATT: Is this the witness, the photographer that is going to say this?

MR. BERLINER: The photographer, who hap-

pens to be Mr. Flam, the president of S & S.

MR. WYATT: What we object to is, unless that machine has been set up under proper operating conditions by the operator, we object to that evidence being received in evidence, unless they can have testimony to the effect that that machine was running as it is supposed to run, and it had not been running in an abnormal fashion.

You can present that evidence, and we will withdraw the objection.

MR. BERLINER: I was present when the machine was operating. The S & S personnel and myself were present, had no control of the operation of the machine. The machine was operating to produce boxes of the type I have in my right hand. This was one of the rejects that we took along.

All we could do was count the speed.

THE COURT: I will allow it under the circumstances. Mark them in evidence, subject to the Court's viewing, of course, the photographs.

MR. BERLINER: We have a film editor, so you can control the rate at which the film moves through; you can stop any frame.

THE COURT: Those are the same as the movie?

MR. BERLINER: These are five selected frames, in sequence.

THE COURT: Let's stay with those for now, and we will worry about the rest later.

MR. BERLINER: We would like the film marked as Defendant's Exhibit D.

THE CLERK: So marked.

****

(So marked.)

MR. BERLINER: The five selected frames in sequence, starting with the first frame, we ask be marked Defendant's Exhibit E-1 through E-5 respectively.

MR. WYATT: Mr. Berliner, may we see the originals of these?

THE COURT: Is that box from your plant?

MR. BERLINER: No.

THE COURT: You took one from the other plant, too, didn't you that day?

MR. BERLINER: I remember taking something, but I don't have it in court.

THE COURT: I know you took one that day. It came off and you took it.

MR. BERLINER: As Defendant's Exhibit F, please mark a collapsed Campbell's Soup carton.

THE CLERK: So marked.

*** (So marked.)

MR. BERLINER: The Carton, Exhibit F, was a reject produced during the run that is shown in the film, Exhibit D.

I offer Exhibits D, E-1 through E-5 in evidence.

MR. WYATT: I think E-1 through E-5, the Court has already ruled on.

As far as Defendant's Exhibit F, what are you offering it for? A Campbell's Soup box.

THE COURT: It is a reject.

MR. WYATT: What is it for, as part of that film?

MR. BERLINER: That was taken from the run that was being filmed. That is a reject.

MR. WYATT: What are you offering it for?

MR. BERLINER: To show the type of box that was being produced.

MR. WYATT: No objection, your Honor.

THE COURT: All right. Received.

THE CLERK: So marked.

***

(So marked.)

E D G A R B . L E H M A N , called as a witness, having been first duly Sworn by the Clerk of the Court, took the witness stand, and testified as follows:

DIRECT EXAMINATION

BY MR. BERLINER:

Q Mr. Lehman, what is your full name and where do you reside.

A Edgar B. Lehman. I reside in Larchmont, New York. Do you want more than that?

Q Who is your present employer?

A My present employer is the S & S Corrugated Paper Machinery Company in Brooklyn, New York.

Q Is that the Defendant in this action?

A That's correct.

Q Will you please outline for the Court your educational background, from high school forward.

A After high school, I attended the Rensallear Polytechnical Institute in Troy, New York, and graduated in 1948 with a C.M.E., a Bachelor in Mechanical Engineering.

Q Have you had any further education?

A Yes. I continued at Columbia University here in New York and received a Masters degree in Industrial Engineering.

Q Have you had any education subsequent to that?

A No. I took some night courses to supplement --

THE COURT: Then you decided to make some money.

THE WITNESS: Yes. I had some good help in getting through school from the Government.

Q Going back to the time you were in college, please outline your work history.

A During summers I worked various years for one month in a foundry, for one year at Alexander Smith's Yonkers, New York in the Research and Development Department of that company, and I had other miscelleneous employment, but only during summers, prior to my graduation from Columbia.

Q What work did you do subsequent to that?

A I went directly from Columbia University in 1949 to S & S, where I was engaged as Assistant to the Vice President for Engineering.

Q Have you worked for S & S ever since?

A Yes, I have worked for S & S for the last twenty-three and a half years.

Q What is the nature of the business that S & S

conducts?

A S & S are manufacturers of machinery for the corrugated container industry. In this, they make the basic corrugating machine which produces the primary corrugated board from rolls of paper, the laminating process.

It is quite a long machine, about 250 to 300 feet long, a combination of machines.

The company also makes converting equipment, such as folder-gluers, which during the last years are about two-thirds of our business volume. It also makes certain smaller machines for supplementing the two primary categories that I have already indicated to you, all for the corrugated container industry.

Q Does S & S manufacture machines for any industries except the corrugated industry?

A No, it does not. It makes a small scuff-tester, which may represent 3 or $4,000 a year business volume for the paper industry for testing the surface of paper against -- for scuff-resistance, but everything else is for the corrugating industry.

Q How many people does S & S employ?

A S & S employs here in the United States just under 500 people, and also employs overseas something over 200 people.

DS:GA
T2R1 PM

Q What does your work at S & S entail?

A Well, I started at S & S, as I said, as Assistant to the Vice President in Engineering, and my work entailed customer technical services, engineering services. When I first went there, it involved the relationship of the customer and engineering, essentially.

Subsequently I got involved in our -- at the beginning of our overseas operations. There the work was broader, including also some peripheral work with manufacturing of machines.

And ten years ago, I was made Vice President of the company for Sales, which includes Marketing, and technical customer services.

Q Now, broadly speaking, what are the component parts of a folder-gluer, as manufactured by S & S?

A The folder-gluer as manufactured by S & S has a feeding device. It can have, but does not have to have, a printing or a slotting device.

And subsequent to that, it has an underfeed, collecting and delivering device.

Q Do you know Albert F. Shields, the inventor named in Exhibit 1?

A Yes, I do.

Q How long have you known Mr. Shields?

A I have known Mr. Shields since I joined S & S in 1949.

Q Do you know where he is today?

A Well, I'm not a 100 percent sure whether he is at home recuperating, or whether he is out-of-state recuperating. But in August-September of last year, he became quite ill and had a lung removal for cancer, and he has not been in the office or active at S & S since then.

MR. BERLINER: I ask that a Chart, marked Chart number 1, which corresponds to Chart 1 previously given, that it be marked as Exhibit G.

THE CLERK: G for identification.

(Article referred to being a Chart, was received and marked Defendant's Exhibit G for identification.)

MR. WYATT: Your Honor, marking this Chart as an Exhibit to us is objectionable because it is in effect a lawyer's brief. If he wants to hand it in as a brief, we have no objection, but to mark it in evidence, unless it is taken in for the purpose of what it is, merely an argument presented by the Defendant, rather than actual evidence of what actually ---

THE COURT: You say it is part of the brief?

MR. WYATT: Well, the front cover that we

have is stamped "R. J. Cantor," who is a lawyer.

MR. BERLINER: Well, let's identify it and we will go on from that point.

I haven't offered it in evidence.

THE COURT: I will allow it in evidence for whatever it is worth.

MR. BERLINER: All right, I offer it in evidence.

THE CLERK: Exhibit G marked in evidence.

(Article referred to, having previously been marked Defendant's G for identification, was now received and marked Defendant's Exhibit G in evidence.)

THE COURT: Merely to show how a box is made, I guess.

MR. BERLINER: I ask that a sheet of corrugated board be marked as Exhibit H.

THE CLERK: H for identification.

(Article referred to, being a sheet of corrugated board, was received and marked as Defendant's Exhibit H for identification.)

MR. BERLINER: I ask that a scored and slotted sheet of corrugated board be marked as Exhibit I for identification.

THE CLERK: I for identification.

(Article referred to, being a scored and slotted sheet of corrugated board, referred to as received and marked Defendant's Exhibit I for identification.)

MR. BERLINER: And I ask that a collapsed corrugated box be marked Exhibit J for identification.

THE CLERK: J for identification.

(Article referred to, being a collapsed corrogated box, was received and marked Defendant's Exhibit J for identification.

MR. WYATT: We have no objection to these.

MR. BERLINER: Then they are offered in evidence.

THE CLERK: Defendant's Exhibit H, I and J for identification, marked in evidence.

(Articles referred to , having previously been marked Defendant's Exhibits H, I and J for identification, were now received and marked Defence Exhibits H, I and J respectively, in evidence.)

(continued on next page.)

BY MR. BERLINER:

Q Mr. Lehman, making reference to Exhibits G, H through J, if necessary, will you please describe how a corrugated box is produced?

A At the beginning, paper is made on a paper machine, in very large, very wide reels, often referred to as a mother reel.

(continued on next page.)

A (continuing) It then is cut into smaller reels. And these reels, or rolls, are received by the corrugating plant, and are combined and glued together into corrugated sheets.

These reels of paper are unwound at one end of the corrugating machine. The middle web of the three webs normally -- It can also be five-webbed corrugated board -- the three webs, the middle one is corrugated and glued to one face, or one side.

And then later on, in the corrugating process of the corrugating machine, a second side is glued to the two-ply material, resulting in a corrugated and scored sheet as per Exhibit H.

MR. WYATT: Your Honor, I have objection. Your Honor, there is nothing in this patent that relates to, or says a word about the claim of this machine being directed to corrugated boxes. It is all very interesting, your Honor, but it is wasting the Court's time, I feel.

THE COURT: What has this got to do with it? I want to know the same thing. What has it got to do with how to make a box, as to what we are talking about, as to whether the machine is using -- similar in nomenclature to the machine that you have, and whether it is underfed or pivotal,

or longitudinal. I don't know what this has to do with it.

MR. BERLINER: Well, the product that is received by the machine of Exhibit 1 is not a complete box --

THE COURT: From what I see in the prior art book, there are many machines that handle corrugated boxes and feeding. And it doesn't make any difference. I will take notice that boxes are corrugated and they are made in certain ways and are sent to shippers, and the shippers get them, and they use them and put stuff in them.

I can hide behind what common sense tells me. I realize that.

Is there any difference about this machine, the way it handles a corrugated box, from the other machine?

MR. BERLINER: There certainly is.

THE COURT: No. We are talking about nomenclature. We are not talking about the way to handle it. That is what I understood. I understood we were talking about nomenclature. From the day we started, we were talking about nomenclature. Whether the nomenclature and the schematic

ideas of one machine were similar in either novelty, validity, infringement or not. That is all. I don't know what this has to do with it.

MR. BERLINER: The machine must handle the product.

THE COURT: Yes.

MR. BERLINER: Right.

THE COURT: There is no dispute that it handles that -- that both machines handle corrugated boxes. No dispute. What do we have to go into it for? It doesn't make any difference how it is made. I couldn't care at this point. The process of how the machine lifts them out. That is what I am interested in.

MR. BERLINER: Wel,, your Honor, I believe we have a combination claim that is under consideration.

THE COURT: What is that?

MR. BERLINER: Claim One.

THE COURT: What is that?

MR. BERLINER: Claim One makes reference --

THE COURT: Yes, the patent itself.

MR. BERLINER: -- to many more elements than just --

THE COURT: But not boxes made by some other company and delivered to you in mother reels, and all this kind of business. It has nothing to do with this machine. From what I saw of the fact -- and you showed me the great big reels that came off them. They were making it from paper to become corrugated boards, and the corrugated boards eventually became corrugated boxes. I saw that.

MR. BERLINER: Well, when you make comparison --

THE COURT: We took a product, where the box is put through the feeder, glued and goes into the machine. You claim one machine is the patent in suit, or the Defendant Universal's machine. That is all we are at now.

MR. BERLINER: The unfortunate part of this case so far is that the Plaintiff has had his day --

THE COURT: You can have your day, too.

MR. BERLINER: There is an accusation of infringement.

THE COURT: There is no infringing about -- Anybody can make a cardboard like that. Anybody. I am sure of that. I keep saying I know nothing about patents, but I am sure that anybody -- If I wanted to manufacture it in my home, they couldn't stop me any more. And that is knowing nothing about patents. I don't have to be an expert on it. What difference does it make?

MR. BERLINER: But the product that is received by the machine is not uniform. And the machine must have certain characteristics to handle it.

THE COURT: I do not agree that that is the issue before me. The only issue before me is whether it be novel or otherwise; whether the machine they are using, their Universal machine, is copied -- Let's get right down to the real nitty-gritty -- is a copy of your machine, so that all of it is so similar that they are infringing upon your rights. That to me is the issue in the case.

MR. BERLINER: Your Honor, they need not have copied to be an infringer.

THE COURT: I use the word "copy" in patents.

I don't use it in terms of two kids in a classroom stealing from each other. All right. I understand that it wasn't a surreptitious thing here. If it was, they wouldn't have put it in a factory and tried to use it. I'm using copy in a different sense altogether. I'm using copy in using the nomenclature and schematic ideas of the machines themselfes.

MR. BERLINER: Your Honor, I believe that unless one knows the background of the invention, one may not be able to fully appreciate it.

THE COURT: Does the corrugated box have anything to do with the background of the invention? It may have something to do with the manufacturing of corrugated material. But surely it has nothing to do with the method of the making of that material.

MR. BERLINER: Well, the box that comes into this machine is not yet completed, because the glue flap is still wet.

THE COURT: Yes, I know. Once it dries out, it is completed.

MR. BERLINER: But you also have panels that are not squared sometimes.

THE COURT: They clap them together. I understand that, too. That is why you have the flaps.

MR. BERLINER: There seems to be some doubt about it when you were looking at the Enterprise machine.

THE COURT: Nobody knows what I am thinking. I have had juries for years trying to figure out what I am thinking. Nobody knows hat I am thinking.

MR. BERLINER: As I recall it, the boxes you looked at are rather square before they had even entered the underfeeding stacker.

THE COURT: Not all of them. That is why they need a flapper on it. That is why they added on the additional piece, in order to make sure they came out square. I know that.

MR. WYATT: Your Honor, there is one final thing I would like to point out --

THE COURT: Give me some credit for knowing something about this stuff. I have been on it for two days. Nobody believes I know it.

What am I supposed to do, make a drawing of it?

MR. WYATT: Your Honor, not only is this patent not directed to just the making of these corrugated boxes, but the patent itself says on its face that it may be used on other boxes other than those that are glued, for instance, unfolded boxes. And in column 1, it says that the delivery mechanism herein disclosed will obviously be used on both folded and unfolded boxes, and therefore the unglued the boxes.

That is another irrelevant area that they are dwelling upon.

MR. BERLINER: Certainly they are used with glued boxes.

THE COURT: In any event, I will take judicial notice that prior -- before the machine can do anything, it must have these corrugated pieces of cardboard manufactured, before they can be placed, so that the machine eventually will take them. All right. I will take judicial notice of that fact. I take notice of that fact. Okay. I will also take notice that both machines, as I look at them now, have flappers for squaring purposes. Okay?

MR. BERLINER: For squaring of panels.

THE COURT: Single panels. We are not talking about the stacks. Single panels. I understand that. I will take notice of that at this point.

MR. BERLINER: Thank you, your Honor.

THE COURT: The question again is whether or not the idea is either prior art, or whether or not is it something new on this flapper that squares each individual panel. Right?

MR. BERLINER: Well, you have heard the Plaintiff's argument --

THE COURT: As to both.

MR. BERLINER: Since the elements of --

THE COURT: Your opposition is that it is your idea, and not theirs, and they can't use it. That's true. That's a fact.

MR. BERLINER: You have seen that many elements are old. But you also have seen that the prior art doesn't show the combination. So you are required to decide --

THE COURT: I will tell you what the issue is, whether or not it is novel, number one; whether or not it is prior art; number three, whether or not it is infringement, and whether it is valid.

MR. BERLINER: I believe even the Plaintiff will concede it is novel. So we have the issue of obviousness.

THE COURT: That may not be the sole issue.

MR. WYATT: We do not consider that any element here is novel.

MR. BERLINER: No, but the combination.

THE COURT: They say the combination of old ideas, put into a new idea --

MR. BERLINER: We say the combination is novel.

THE COURT: That is what they say. You say that that is old. It may be old ideas, or a combination of old ideas, but still it is your idea, and therefore, it could not be put into this machine.

MR. BERLINER: We say it is a new combination of old ideas.

THE COURT: Well, that is what I am saying. It is a new combination of old ideas.

MR. BERLINER: You may even find that there is a novel element.

THE COURT: A what?

MR. BERLINER: In the combination.

THE COURT: A what?

MR. BERLINER: That there is something novel in the combination. But if you let us develop it --

THE COURT: I just want to get over this. I will let you develop your part of it if you want to, and infringement, if you want to, but I do not think we have to go into how a box is made. That is not what I am concerned with. Okay.

MR. BERLINER: I would like this nine-page document marked as Exhibit K.

THE CLERK: Nine-page document marked for identification as Defendant's Exhibit K.

(Document referred to, consisting of nine pages, was received and marked as Defendant's Exhibit K for identification.)

Q Mr. Lehman, have you seen this document before?

A Yes, I have.

Q Where did the document come from?

A It comes from our regular files in the office. Both this one -- Both under the company name and under the -- and in another file as well, referring to the TAPPI, which is the

Technical Association of the Pulp and Paper Industry.

Q Will you please tell us what this document, Exhibit K, is?

A The document --

MR. WYATT: Your Honor, I have an objection here, unless Mr. Berliner can say the purpose of what this is offered for, your Honor.

It is a letter from Mr. Zeigler, who is not here in this courtroom, to all members of the TAPPI Committee, members of the Engineering Committee, and on its face, it is blatant hearsay.

And unless Mr. Berliner mentions what purpose he wants to offer it for, and as to what this witness --

THE COURT: Well, I think all he is trying to show is that it is a performance checklist of the patent machine --

MR. BERLINER: To show what factors are being considered.

THE COURT: I will allow it for that reason.

MR. BERLINER: We are not offering it for the truth of any assertions --

What I understand --

MR. WYATT: We withdraw our objection if

that is the purpose.

MR. BERLINER: Well, I offer K in evidence.

MR. WYATT: No objection.

THE COURT: I understand these are factors that must be considered in using that machine. Without those factors, it is not worthwhile.

THE CLERK: Defendant's Exhibit K, previously marked for identification, now marked in evidence.

(Document referred to, having previously been marked Defendant's Exhibit K for identification, was now received and marked Defendant's Exhibit K in evidence.)

Q I refer you to a page having the number 3 in the lower righthand corner of Exhibit K, and particularly to Item 5-L, under the general heading "Quality."

Will you please explain to the Court what that means?

A Manufacturing joint gap variation with an alignment is one of the key factors in deteriining the quality and usability of a box.

It is also one of the key evaluations of the machine as to whether or not it can operate within the required specifications in this category.

If the gap -- May I use, I think it is Exhibit I, as a crutch?

(continued on next page.)

JB:GA
T3R1 PM

Q Go right ahead.

A If the gap -- the key in the usability of a corrugated container -- one of the main keys is what is called the girth of the box. The girth is -- If it is too large --- the material inside is fragile, and it will not protect it. It can rattle, and it will break. If it is too small, the girth of the box, the girth of the box is too small, then it will be difficult or impossible to insert automatically -- fill automatically in the machine, and there will be serious down-time and losses in earnings by the plants that have problems with boxes that are too small in girth.

Therefore, the control of the girth of the box, which shows as a control of the gap between the two folded panels, is one of the keys to the manufacturing of a box. The tolerances specified by the users in general, and therefore asked or demanded from the machines by the box-makers for a box of this type as Exhibit I, which would be a gap of three-sixteenths of an inch, not to exceed one-sixteenth larger, and not to be less than one-sixteenth smaller.

Therefore, a box which -- where the folded panel butts, or overlaps, or comes even close, would be an unacceptable box. A box where the edges are off one-quarter of an inch,

at that point, they would be unacceptable boxes and prone to trouble in the filling and use of the shipment of the boxes.

Q In your testimony you have just been referring to Exhibit J.

A Excuse me. There is another point I must add.

Is this J? I can't read it. It's -- The ink is spilled on it.

Q Yes, it's Exhibit J.

A Okay. Exhibit J.

And another key, and why this is so important, this gap control, is that when the box is set up and you have an overlap at the joint, then it is impossible mechanically to get the inside panel past the two outside flaps. I should have said inside flaps, past the two outside flaps.

Since a large quantity of the corners are mechanically closed, we can't rely on somebody observing how the box is joined in compensating for it. But the box must be within the tolerance demanded by the filling and closing machine. Therefore, the tolerances -- They are called the tolerance requirements.

Q Will you please mark on Exhibit J the gap you have just been referring to.

THE COURT: Just put an arrow each way, right across. Extend it the other way, the

arrows facing both ways. Put "gap" on there so I will know what you are talking about.

THE WITNESS: Yes, your Honor.

At both ends?

THE COURT: It doesn't matter. I will know it means both ends.

THE WITNESS: Yes, your Honor.

MR. BERLINER: I ask that a flat corrugated box marked "Geritol" be marked for identification as Exhibit L.

****

Q Mr. Lehman, will you please examine Exhibit L.

A Exhibit L.

Q Tell me what it is.

A It is a normal, regular slotted corrugated container which I took from a factory out of a large group of boxes together with some other identical boxes Geritol boxes. And I brought this because it shows how out of a normal run, a defective box could result. Some were good, some were bad. This is defective. As we can see, in one end there is a small overlap of the two folded panels.

THE COURT: It makes it difficult to fold?

THE WITNESS: Yes. It would make it difficult to close prior to shipment with its

merchandise.

The reason -- If you wish me to go into that -- The reason why this often happens, and why a control for gap is so important, is that paper is really a rather -- as its made, is a rather inconsistent material. Its moisture content from one side of the roll to the other side of the roll, and within the roll, can vary from a minimum from 3 to 13 percent, as reported to the industry by most major paper companies recently at a public, taped meeting. And with a variation in moisture in the paper, the combined corrugated board has certain real inconsistencies. And it is for this reason that accurate folding is a craft and is not very simple.

MR. BERLINER: I offer Exhibit L into evidence.

MR. WYATT: No objection.

THE CLERK: Defendant's Exhibit L, previously marked for identification, marked in evidence.

Q How many out of tolerance gap boxes are usually acceptable?

A It depends on the customers. The big customers that

consume the large volume of corrugated boxes will accept essentially none. They will complain if out of a truckload of 10,000 boxes -- if out of such a truckload, five are defective boxes, or four, because these defective boxes could cause interruptions of up to ten minutes, and other damage on the filling and closing line. Each interruption of ten minutes could be worth -- I don't know -- 10, 20, $30 or more, and could cause overcooking, undercooking, and all kinds of problems on the -- on the part, or for the user of the corrugated boxes.

MR. BERLINER: Will you please mark as Defendant's Exhibits M and N, two sheets of corrugated board, each having white liners on one side.

**** THE CLERK: So marked.

MR. WYATT: Are they identical?

MR. BERLINER: The witness will testify.

Q Mr. Lehman, have you seen Exhibits M and N before?

A Yes. I personally took these two sheets from the end of a corrugator. They are identical in size. And they were taken from a run from the corrugator side-by-side. And I brought them to show how the variation of the consistency of papers in terms of humidity content and fiber content

can vary very substantially from side to side.

THE COURT: From the same cut?

THE WITNESS: From the same cut. That's because the reel of paper varies.

THE COURT: Right.

Q How long ago did you obtain Exhibits M and N?

A Within the last thirty days.

Q Is Exhibit M relatively flat, and Exhibit N relatively more warped?

THE COURT: One is warped and one is flat.

THE WITNESS: Yes.

THE COURT: Exhibit N is the -- Which one has the moisture, the warped one or the flat one.

THE WITNESS: The warped one would demonstrate an imbalance of moisture between one side and the other. Exhibit N.

The flat one would exhibit a uniformity.

THE COURT: Uniformity throughout.

THE WITNESS: That's correct, sir.

THE COURT: All right.

Q Is it unusual, using a board having a warping to a degree that Exhibit N is warped in the manufacture of boxes?

A It is not normal, but it is not unusual. It is a common

practice to get this a few times during the day in some quantity. And the machines that have to do the converting of the sheets have to be capable of handling this set of conditions.

THE COURT: What happens to the warped sheet? Does it go through to its final process, or is it thrown off?

THE WITNESS: The warped sheet, unless it is over-warped to the point where it can't be used, goes through into the final process.

THE COURT: All right. What is the final outcome of the warped sheet?

THE WITNESS: But not necessarily. It can jam up the machine if the machine can't handle it.

THE COURT: The machine will jam and stop, and you will pull it out?

THE WITNESS: Yes, that's correct.

THE COURT: But it's not pulled from the assembly line?

THE WITNESS: No. Not unless it is so extreme that there is no hope for using it in the final process.

THE COURT: All right.

THE WITNESS: There is a limit, also, in terms of the amount of warp which will --

THE COURT: Is this -- Does the machine -- We are talking about the Shield machine. Does that in any way have to do with warped pieces of corrugated -- corrugated warped cardboard like this? Will it reject that type?

THE WITNESS: No, your Honor.

THE COURT: It wouldn't reject it. If it fits with the -- If proper slots are made properly, it will go up and down and so forth? Or won't it?

THE WITNESS: It may not. Depending on the relationship as it is underfeeding into the delivery. If the tail end of -- If one is warped down badly enough, it may obstruct the entry.

THE COURT: If this comes through with a feeder, and it's put into that, your machine -- whatever one -- your Claim One patent machine -- then it's taken and sent through, and then it's glued, sent through, and the man at the end funnels it?

THE WITNESS: That's right.

THE COURT: Do you know anything about the Universal machine, whether that would reject

it? Do you have any idea whether the Universal machine would reject that if it went through in a warped condition?

THE WITNESS: No, the Universal would not reject it.

(continued on next page.)

R 2 fls

THE COURT: Are you saying that with your engineering expertise, or are you just telling me as a presumption as far as you are concerned?

THE WITNESS: No, it's with my knowledge of the operations of both machines in the field. There is no way to reject. The only method --

THE COURT: Jamming?

THE WITNESS: It would be to jam up the machine.

THE COURT: That's the next question.

Do you know that piece that I am looking at right now? Would that be rejected by your machine, as far as you know? And by "machine," when I say "yours" I mean the defendant's machine, the shield machine.

THE WITNESS: No. I think this sheet would go through our machine.

THE COURT: How about the Universal, would it go through the Universal, as far as you know, or would it jam the machine?

THE WITNESS: I believe it would go through the Universal.

THE COURT: It would go through. Going through that like that , would there be any

chance of a flap in any way straightening out the edges with that piece of board, or would that come through uneven? It has to be an individual blank, wouldn't it?

THE WITNESS: Yes.

THE COURT: Going through the machine.

THE WITNESS: Yes.

THE COURT: Now, that is the warped --

THE WITNESS: Yes.

THE COURT: Having an imbalance moisture in it and going through that machine, would that flap at the bottom, would it be able to straighten that out so that all sides would be even, or would it still be warped when it comes out so that it will not be able to be used properly?

THE WITNESS: If there is an unevenness in the moisture -- especially due to the high moisture, the bonding of the sheet itself may not be perfect if a fold comes --

THE COURT: Would you get a crinkle?

THE WITNESS: It might. But what would happen, if there is an area where there is improper bonding of the corrugated board, then there would be no contol at the folding points

which would cause the folded panel to come in farther. It stays out. And it may not be possible to rectify the panel folding in terms of closing the gap or opening the gap.

THE COURT: All right. O.K.

MR. BERLINER: I offer Exhibits M and N into evidence.

MR. WYATT: No objection, your Honor.

THE CLERK: Defendant's Exhibits M and N, previously marked for identification, marked in evidence.

Q Turning back to Exhibit K --

THE COURT: One other question: If that goes through, will that -- I am not talking about the leading edge or the far edge, the rear edge, I am talking about the piece itself when it goes through. If it is warped in that condition, it's not going to be flatened out or straightened out like the one under it, like M?

THE WITNESS: No.

THE COURT: Wouldn't that sort of make the pile higher?

THE WITNESS: It could do that; it will.

THE COURT: By whatever degree -- I don't

know how many inches or whatever the amount would be, would that in any affect, let's say, in your machine first, your pusher type, would that in any way affect the count?

Just a moment. Excuse me for one moment.

(Recess taken.)

THE COURT: All right, we will adjourn now until tomorrow at 10:30 a.m.

(Whereupon, an adjournment was taken to Friday, February 9, 1973, at 10:30 a.m.)

INDEX

Witness	Direct	Cross
Don A. Fischer	223	260(F)
Edgar B. Lehman	326	

EXHIBITS

		For Id.	In Ev.
Government's			
19	File History	223	223
20	Claim One Blowup		234
21	Blowup Chandler	242	243
22	Blowup Fig 7 & 8	243	243
23	Bloup of Gjostein		253
24	Letter dtd 6/4/69	319	320
25	Letter, Bleriner to Colvin	320	320
26	Berliner to Craft Corrug	320	320
Defendant's			
D	Film	324	
E1-E5	Photos, 5 selected frames	324	
F	Carton-Campbell's Soup	325	326
G	Chart #1	330	331
H	Corrugated Board	331	332
I	do (scored-slotted)	332	332
J	Collapsed box	332	332
K	9 pg Document	344	346
L	Geritol box	349	350
M-N	2 sheets corrugated board	351	358

TRANSCRIPT OF PROCEEDINGS FEBRUARY 9, 1973

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF NEW YORK

----------x

KOPPERS COMPANY, INC., and UNIVERSAL CORRUGATED BOX MACHINERY CORPORATION,

Plaintiffs,

-against- 70-C-926

S&S CORRUGATED PAPER MACHINERY COMPANY, INC.,

Defendants.

----------x

United States Courthouse
Brooklyn, New York

February 9, 1973

B e f o r e:

HONORABLE MARK J. COSTANTINO, U.S.D.J.

BURTON SULZER
OFFICIAL COURT REPORTER

Appearances:

WYATT, GERBER & SHOUP, ESQS.,
Attorneys for Plaintiffs
230 Park Avenue
New York, New York

BY: DOUGLAS WYATT, ESQ.,
ALBERT C. JOHNSTON, ESQ.,
-and-
BOYCE DENT, ESQ.,
Of Counsel

OSTROLENK, FABER, GERB & SOFFEN, ESQS.,
Attorneys for Defendant
10 East 40th Street
New York, New York 10016

BY: SIDNEY G. FABER, ESQ.,
-and-
JEROME M. BERLINER, ESQ.,
Of Counsel

BS/dl

Take 1/1

MR. FABER: May I just -- we will see if we can find out how we are going. I know the Court has indicated it would like to finish this case today. The usual patent infringment suit, the plaintiff who is charging infringment goes on, he tells the things that are required by the Graham against Deer case and others, he tells the story, the background of the patent, what the patent is and somebody comes along and tries to knock it down, which is their job, and then there is rebuttal.

This case has gone in in a different direction, where we have had three days of knocking down what amounts to the plaintiffs case, and we had about 20 pages of record yesterday on what is really the plaintiffs case.

We are charging infringment and we want them to be held liable. What the Court has indicated, we only have a few hours to present the whole of our case and I tell you frankly, your Honor, it is not possible to do so and do justice to this Court and to the parties involved.

I would simply ask if we could establish a schedule if we don't finish today. You may be

much wiser on these things than I am. When will we be able to come back?

THE COURT: On Tuesday I have two criminal cases that must go. Of course I had told both lawyers, it being a non-jury case, that I would pick other days where we could work the entire day. I don't know that by giving you a date at this time I could do so. I would know it, let's say, the day before, two days before.

MR. FABER: If you could give us an area of time.

MR. WYATT: It could be our cross-examination will be very short and we can indeed finish to day, there is that possibility.

MR. FABER: I appreciate your indulgence.

The Supreme Court has said that under the obvious new statute of the patent law, it happens to be section 103, and there are three conditions, each of which must be satisfied, leading to several basic factual inquiries.

Under Section 103 the scope and consent of the prior are to be determined, differences between the prior art and the claims at issue are to be ascertained, and the level of ordinary skill in

the pertinent art resolved, not by some atomic genius type of people, but ordinary skill. In this way patent law is no different from any other law, the reasonable man doctrine.

Against this background the obviousness or non-obviousness of the subject matter is determined. Then such secondary considerations as commercial success, long felt but unsolved needs, failure of others might be utilized to give light to the circumstances surrounding.

Then the Court goes on and says, "We believe that strict observance of the requirements laid down here will result in that uniformity and definiteness which Congress called for in the 1952 act."

MR. WYATT: Your Honor, I would --

MR. FABER: I am not done yet.

About two or three years ago we had a case in Chicago before a Judge who was very able, very rigid, and the Court of Appeals -- it happened to be the Blonder-Tongue case. We went to the Supreme Court and when the argued there -- University of Illinois Foundation against Blonder-Tongue. The Court of Appeals in that case went

down the line and stated that the trial Court had to follow the rules of Graham against Deer.

Judge Douglas, not in the Blonder-Tongue case but another case that came up just before, stated that the trial Court -- we don't make the rules -- had to follow those rules.

MR. WYATT: Due to the shortness of time, we object to argument at this point.

MR. FABER: At that point, Judge Hoffman was severely criticized for not following the rules.

THE COURT: Who says I am not going to follow the rules?

MR. FABER: I know you will. They are tough rules to follow and it requires testimony and we can't do it in an afternoon.

THE COURT: I would rather follow those rules than the rules I had to follow this morning. These are easy rules.

MR. FABER: These rules are nothing as to what took place this morning. There a man's liberty was involved and that is more important.

THE COURT: You seem to be very concerned as to whether the Court is going to substitute

its own method of law in the case or whether it is going to follow the case law as set down by the United States Supreme Court.

Last night I had a conversation with my wife at the table and she said to me -- I was looking at some of the material that I had to speak on -- this can be off the record.

(Discussion off the record.)

MR. FABER: I am simply pointing out, your Honor, that the burden is on us; we have to give you the testimony in order to be fair to the Court and our client.

THE COURT: I will not foreclose you from giving me that testimony, absolutely will not foreclose you. The only thing I have been saying is this, it may very well be, for instance, on Tuesday -- I think it is a new day for jurors -- in any event, it may very well be that all I would do is select a jury on Tuesday, or be able to put it over until Wednesday to select, and this case would be able to go forward.

MR. FABER: Thank you so much. We could then finish it by Tuesday. And I am sure that we could fit it in, your Honor.

THE COURT: The lawyers before me, I am almost certain, will accede to that and I won't have a problem with them. So I wouldn't be too concerned with not being able to finish today.

E D G A R B. L E H M A N, resumed the stand and testified as follows:

DIRECT EXAMINATION

BY MR. BERLINER CONTINUED:

Q At the close of yesterdays session there was an open question. I will read it from the record.

"THE COURT: One other question, if that goes through, referring to the N -- will that -- I am not talking about the leading edge or the far edge, the rear edge, I am talking about the piece itself when it goes through if it is walked in that condition it is not going to be flattened out or straightened out like the one under it, like M?

"THE WITNESS: No.

"THE COURT: Wouldn't that sort of make the pile higher?

"THE WITNESS: It could do that, it will.

"THE COURT: By whatever degree, I don't know how many inches or what the amount would be,

would that have any effect, let's say, in your machine first, your pusher type, would that in any way affect the count?"

THE COURT: What is the answer?

Q Mr. Leham?

A The answer is that the pile itself has weight and if the warp is such that the weight would flatten out the boxes it would not affect the pile.

The situation is that in an underfeed machine the box is able to go in freely and as you indicated, your Honor, as the side panels in warped condition are folded there is an upward force which both forces the pile up, tends to, and, in addition, also tends to open the glue rack which at this point is only tacky.

One of the things in the underfeed machine is that the boxes, folded blanks, come into the bottom of the pile, they are restrained on all sides, including on the top, and this glue lap is restricted from popping open.

Whereas on the prior art right angle delivery, one of the real problems was that as the box came out of the folding section it was erased completely and was no longer restrained and when this type of warp was in the folded blank the tendency was to have the glue lap pop open.

So that we have a number of problems, your Honor,

including the opening -- I shouldn't say "we" but a number of problems existed on the right angle delivery type of device which prevented running certain types of warp, and this of course is the reason why the underfeed stacker devices are desirable. It allows better productivity than the right angle device.

THE COURT: One moment, please.

THE WITNESS: Your Honor, the key to handling warped board or stiff board with small panels, the smaller the panel the stiffer the folding point is, the key is never to lose control or give up control of the box at the time it leaves the folding section of a folding machine going to the stacking device, because that's where the problems happen if control is given away, if the material is no longer fully controlled.

Q In answering the last question, you referred to a right angle delivery. Would you please tell the Court what that is?

A I am speaking in that sense of the right angle delivery as in the Universal Comet, Defendant's Exhibit B.

Q What portions of Defendant's Exhibit B are you referring to?

A I am referring to the portion of Defendant's Exhibit

B indicated in red as two and not physically visible on this particular exhibit.

Q Very briefly, and in a general way, please tell the Court how the machine of Defendant's Exhibit D operates.

MR. WYATT: Your Honor, this is now the fourth time we have had an explanation of that.

This is not relevant to this patent in suit.

MR. BERLINER: Your Honor, you have not had one explanation by anyone who is skilled in this art.

THE COURT: Skilled in what?

MR. BERLINER: Who is skilled in this art and who really knew the machine. We are entitled to present it our way.

THE COURT: Do you know about that machine, sir?

THE WITNESS: Yes, your Honor.

THE COURT: Tell me.

Q- It will be brief.

A What in fact happens at the end of the folding section or folding belts is that the folded blank is

jettisoned out onto a right angle conveyor which moves at a continuous speed, thus causing the folded boxes out of control, or without control, I should have said, to fall onto the conveyor and move laterally at a predetermined pace in a shingled fashion.

If the glue joint pops open at this point, then there will be a jam up and the whole machine line will have to stop.

Q What condition are the boxes in when they pass from Section One to Section Two in Exhibit B?

A The condition of the boxes is that the boxes are folded and the glue joint is tacky and adjustable and could pop open at that point.

Q Are the panels, the folded panels facing upwards during the passage between Sections One and Two?

A Yes, the folded panels are facing upward at that point.

Q And is there anything holding the folded panels down during the passage between Sections One and Two?

A No, there is not, because the stationary device that would be allowed to drape there would be jerked sideways by the movement of the conveyor and the boxes and would disturb the uniform movement to the side of the shingled boxes.

Q What is the output of Section Four of Exhibit B?

A Section Four in Exhibit B is a counting device into which the shingled boxes are dropped from the top.

Q Turning back to Exhibit K, and particularly items 7A and 7F on page three, would you please compare the floor space requirements for a machine such as in Exhibit B with the accused machines, and by accused machines I mean the coppers underfed stacker straighteners.

A A closer thing of corrugated board requires the fastest rate which will not choke up a corrugated plant; therefore, it is desirable to flow as quickly as possible to the shipping dock with the raw material being processed.

The right angle delivery spreads laterally in the plant and is an obstruction to the flow and it takes more floor space, therefore the desirability is for a straight through machine rather than a right angle machine of this type.

Q What portions of the machine in Exhibit B would be replaced by an underfeed stacker straightener with inline delivery?

A Section Three and Section Four would be replaced by the inline stacker straightener delivery.

Q Would Section Two also be replaced?

A Yes, Section Two would also be replaced.

Q What is the comparative floor area required

for Sections Two, Three and Four as compared to that required for an underfeed stacker straightener?

A I would have to guess, but I would assume that the lost floor area in the plant would be an amount at least four times as much but the question of obstruction to material flow through the plant is as serious as the loss of flow area.

Q Will you please explain what you mean by obstructing floor material through the plant in connection then with the configuration of Defendant's Exhibit B machine?

A The material that is processed in corrugating plants is placed either on pallets, which must be moved by power, fork lift trucks, or that is placed in high stacks on floor conveyors.

It is obvious that the handling of material on floor conveyors is preferred and is done more readily on a straight direction than if it had to go through a series of angles to circumvent an obstacle.

Q Would the machine of Defendant's Exhibit B require this angular movement of the material handling device?

A It would to material which normally would flow in that way, but cannot because of the obstruction in Section Three and Four on Exhibit B.

Q Mr. Lehman, would you please focus your

attention on the years 1949 through 1956 and tell the Court in detail what your activities were during that period?

A In 1949 when I started at S&S I was assistant to the vice president in charge of engineering and I was physically located in the engineering department, co-ordinating engineering work, having discussions with engineers and designers all in relation to custom services, technical services and the requirements of the industry.

At the same time, obviously to carry this out, I also had discussions with engineers from the companies producing corrugated containers.

Q Did you attend any trade shows or industry meetings during that period?

A Yes. I went to the TAPPI meetings, which are the meetings of the Technical Association of the Pulp and Paper Industries, and they were held twice a year. They lasted a number of days and allowed for very interesting and excellent exchange of technical information among the various attendants, machine builders and corrugated box plants and certain consultants in the industry.

Q Were right angle delivery machines available prior to the making of the Shields invention in suit?

A Yes, I believe -- I know that right angle delivery conveyors were available.

Q And did those conveyors receive folded glued boxes before the glue joints had set?

A Yes, that is correct.

Q Do you know any company that was using such a device?

A Yes, the Equalock Company -- I believe that's the name, or the Hottendorf Company, it was called, the Equalock machine -- used such a device.

Q Do you know of any other people that used that device?

A I'm not sure I'm completely clear on the question, but all closure machines, nearly, used a right-angled device at the end of their machines, at that time, if they were mechanically rather tha manually handling boxes out of those closure machines.

Q Well, I was referring to the general type of right-angle machine of Exhibit B. Not the Exhibit B machine necessarily, but just that general type.

A That type of conveyor, delivery conveyor, was used. You indicated prior to the date 19--

Q Prior to the invention of the Shields underfeed stacker straightener.

A Yes, was available. I don't know when the first Universal --

Q I didn't ask you that. Do you know if the Kieckeffer Company had such a machine prior to 1956?

A Yes, the Kieckeffer Company did have such a machine for many years prior to this, I believe, which I think was generally referred as the Quadlock machine.

Q Will you please describe the Kieckeffer Company for the Court?

A The Kieckeffer Company was a large independent paper-making and corrugating company that was seventeen or eighteen years ago acquired by the Weyerhauser Company, or absorbed by the Weyerhauser Company, and it is now the Corrugated Container Division of the Weyerhauser Company.

Q Did Kieckeffer build any of the machines that used to produce boxes?

A Yes, I believe that they built certainly the initial machines used to produce folded boxes themselves at that time. That was before their acquisition, and maybe in the early years after the acquisition. I'm not exactly sure of the date when they stopped.

Q About how many plants did the Kieckeffer Company have in the period between 1950 and 1955?

A I think something in the area of twelve or fifteen plants.

Q Does the Weyerhauser Company use underfeed

stacker straighteners with in line deliveries?

A Yes, they do.

Q Is it accurate to say that prior to the invention of the Shields underfeed stacker straightener the industry -- that is, the industry that manufactured machines for producing corrugated boxes -- had headed in the direction of using a shingle-type take-off from the folding machine --

A Yes, sir.

Q (Continuing) -- to receive boxes?

A That is correct.

Q Is an underfed stacker straightener for glued boxes the type of machine that could have been developed routinely in 1956 by those skilled in the art of designing box-making and handling equipment?

A Well, I would have to say --

MR. WYATT: I object to that question for the same reason that he objected to a similar question to our expert, your Honor.

THE COURT: Sustained for that reason.

(Recess had.)

MR. BERLINER: Your Honor, in connection with the last question, I'd like to point out to the Court that Mr. Lehman is the only witness that's been presented or is available in the Courtroom

who had any knowledge about this art at the time the invention was made. And one of the considerations --

THE COURT: You mean the Shields invention?

MR. BERLINER (Continuing): -- for the Court --

THE COURT: The Shields invention?

MR. BERLINER: Yes, sir. One consideration or one determination that the Court must make under Graham-Deere is the level of skill possessed by those skilled in the art to which the invention pertains. The plaintiffs didn't put anything --

THE COURT: I'll allow it.

MR. WYATT: Your Honor, I withdraw the objection.

THE COURT: I'll allow it. You may answer.

MR. BERLINER: Would you please reread the question?

(Last question read.)

THE WITNESS: I would have to answer no to that, because --

Q Why?

A It was --

Q Why?

A Because there was very little experience in the first

place in our industry among the machine-builders, and elsewhere in handling and folding -- specifically I should say folding corrugated blanks, because they are variable. The experience had not been developed, and the tendency was to go the easiest way.

And in my opinion it is unique and required somebody a little unusual, substantially unusual, to come up with a new method of an underfeed stacker and delivery, which is now, after many years, and realizations, coming to be in high demand because of its greater control and versatility and marketability.

THE COURT: But it's not the folding that's important here, it's the stacking and the straightening that's important in this? I mean the Shields machine was not invented for the purpose of folding corrugated boxes?

THE WITNESS: No, sir.

THE COURT: The purpose was so that there'd be a machine that could stck, lift out and tie?

THE WITNESS: It's the ability --

MR. WYATT: Your Honor, in line with that, we'd point out that the patent itself says, "The delivery mechanism disclosed will obviously

be useful on unfolded blanks."

Just blanks. There is nothing in here about that subject, your Honor.

MR. BERLINER: Your Honor, they talk about folded boxes, in the patent.

MR. WYATT: And unfolded.

MR. BERLINER: If I can read to you --

THE COURT: But I'm looking at the patent title itself:

"Blank stacking, straightening and delivery device," it isn't a question of folding, it's a question of -- if you put one piece of board through it it would do the same thing as long as the dimensions were the same. In other words, instead of folding a box and making a box out of it, if you've got the same size box you have there, cardboard, and put it in that machine, wouldn't it stack it and do the same thing, count it out?

MR. BERLINER: However, prior art machines for stacking --

THE COURT: I want him to answer, he's the expert.

MR. BERLINER: Excuse me.

THE COURT: Forgetting the -- you are folding

a box with the slits and everything that goes with it -- if you don't mind me getting down to a very common denominator -- and you put one piece of cardboard corrugated or any other way, and you put one piece into this machine; the machine wouldn't reject it because you haven't got a folded box?

THE WITNESS: That's correct.

THE COURT: Of course it would stack it, or the computer or photocell has counted X number of stackings, and it would shove them off, isn't that true, and with spanking it would have nothing to spank it?

THE WITNESS: It would be easier on the underfeed than on the preliminary side.

THE COURT: I understand that, but I'm not talking about underfeed, overfeed, or side feed. Whatever feed it may be, it doesn't make any difference whether it's folded, the dimensions -- as long as the dimensions fit within the confines of that area, as they said, the rotary area or whatever it may be, it wouldn't make any difference?

THE WITNESS: No.

THE COURT: That's what I don't understand.

I want to know whether these machines -- Mr. Faber read to me this morning there what the Supreme Court said I must decide. That's what I'm interested in, the novelty, the infringement, the validity, not how a box is folded. And I think we're going way off-course.

MR. WYATT: Your Honor, we have been on this continual tack way off-course all along here.

MR. BERLINER: The patent particularly points out, now reading from Column One, starting at line 56, "This invention has particular utility in stacking and straightening inaccurately folded blanks."

THE COURT: Yes, I understand that, I understand that.

MR. BERLINER: Incidentally, it can handle --

THE COURT: But it doesn't make any difference how it's folded. It would spank anything that's not accurately folded, too.

MR. BERLINER: Yes, it will.

THE COURT: That's not what we're talking about. We are talking about whether they have modified or infringed upon your machine so that the underfed-type machine is similar in every way,

so that there is an infringement involved. Putting it down to the very simplest, lowest common denominator that I can possibly state.

MR. BERLINER: Well, we --

THE COURT: Since I'm not an engineer, I cannot put it in any other phraseology, I cannot use phraseology that would --

MR. BERLINER: Well, we believe this is a pioneer invention entitled to breadth --

THE COURT: I honestly don't believe that. I don't believe you believe it's a pioneer invention. I believe you believe you have used novel, prior art to make a new invention. Not a pioneering invention. Pioneering to me would be like making a wheel with spokes in it. That would be a primary invention.

MR. BERLINER: This isn't far from it in the corrugated box field.

THE COURT: I don't feel that way.

MR. BERLINER: You may not feel --

THE COURT: I have to decide that the prior art is such that the novelty of it is immaterial. You've done something with the prior art to make such a conglomeration of parts put

together that it is new, is new, so that no one could use -- so that anyone who would use it, it would be an infringement. That's what I understand it to be. I don't know anything else, and he's nodding with me for a change.

I don't know, and I'm putting this on the record because I assume that patent cases go on appeal anyhow, so I understand that my good brethren understand what I was trying. It's a horrible thing when they don't understand that the Judge below knew what he was trying.

You know, sometimes they don't feel that way, that he understood the case.

But I understand the case. So please get the boxes. I think that we've been all through that now. As far as I'm concerned, it makes no difference whether it's a flat piece of board or whether it's a cardboard, it will stack the same way. The novelty of the machine -- it's a question of whether the novelty of the machine is such that there is an infringement because you have made something new out of prior art. That's all, a simple denominator. I know of nothing else to try in this case.

Q Mr. Lehman, will a sheet stacker necessarily handled folded boxes coming in on end? And the end I'm talking about in the case of a corrugated box would be the end where the corrugations are exposed?

A I didn't understand the question.

MR. BERLINER: Please read the question.

(Last question read.)

THE WITNESS: Could you elaborate on the question? I don't understand the point.

THE COURT: I don't understand the question either. What do you mean by "ends"? Do you mean standing up now? It can't be because the feeder flattens them down, the feeder into the machine has them slapped down when they are put int.

Q Will a sheet stacking machine necessarily handle folded boxes made of corrugated board when these boxes are fed in generally horizontally with the exposed corrugation edges following from box to box?

THE COURT: You mean the trailing edge against a leading edge? The trailing edge of one box against the leading edge of another?

MR. BERLINER: Well, the leading edge of the trailing box.

THE COURT: Yes, that's what I'm talking about,

the leading edge of the trailing box. I'm trying to understand your question, too.

MR. BERLINER: It's behind the trailing edge of the leading box.

THE COURT: Right. It has to be.

MR. BERLINER: And both the leading and trailing edges have exposed corrugations.

THE COURT: All right.

MR. BERLINER: And we're talking about a folded box.

THE COURT: Did you follow that?

THE WITNESS: Yes, if corrugations are exposed -- I'm trying to myself rephrase the question so I'm clear what I'm answering.

If the corrugations are exposed, which would mean it is a defective box -- is this your reference?

Q No, I'm not -- I'm referring to a box --

THE COURT: Let's see if I can rephrase your questions because I think I understand what he is trying to say. He's trying to say if the leading edge, the leading edge of -- no, the trailing edge of the box, the trailing edge-- that would make it first -- if the corrugation is

now uneven as shown, it comes in contact with the leading edge of the box behind it -- Are you talking about that -- will the machine accept it or would they --

MR. BERLINER: No, I wasn't making that --

THE COURT: Then I don't understand.

MR. BERLINER: Let's pose a different question.

THE COURT: I think you'd better, because I don't understand that one.

Q Do you know whether machines adapted to handling a stack of flat sheets will necessarily handle folded boxes before the glue flaps have set?

THE COURT: Well, I don't know. You'd better answer that one.

THE WITNESS: Could you read that again, please?

THE COURT: I thought the presumption was -- Before we had the question I thought the presumption was the glue was on them when they are fully set before they get into the stacking machine, then it goes off. That's what I thought. Did I understand that right?

MR. BERLINER: Perfectly, your Honor.

MR. WYATT: What --

MR. BERLINER: Perfectly.

THE COURT: Do you understand now what the question is? That's what the question is.

MR. BERLINER: But the boxes that we want this sheet stacker to handle do not have their joints fully set.

THE COURT: Fully set, yes.

MR. BERLINER: We want to know if blank stackers will necessarily be able to handle that type of box.

THE WITNESS: Blank stackers that you referred to would be other types of machines?

THE COURT: Yes, I was going to say, were you presupposing that one machine will handle it and the other one will not?

That's a presupposition. I felt the same way. My train of thought is running the same way. I'm not an engineer myself, I don't know why it is.

MR. BERLINER: Just because the machine is capable of handling --

THE COURT: Don't argue, because I have enough problems now. He has the same problems, he's your expert, not I. So try to explain it

to him.

Q Just because a machine is capable of handling both flat sheets and folded boxes, doesn't mean that a machine particularly constructed for handling sheets will also handle folded boxes?

THE COURT: But that's not what we're talking about here.

MR. BERLINER: Well, we seem --

THE COURT: We're talking here about machines that will handle both, so we don't have to wrry about the ones that only handle flat sheets. We're talking about a machine, so that we don't have to presuppose anything --

MR. BERLINER: In focussing on this invention --

THE COURT: How did I get involved in this case all of a sudden? I really don't want to get involved in it. I tried very hard not to get involved.

MR. BERLINER: In focussing on this invention, the fact that the machine is capable --

THE COURT: I have an issue on two things only, now. As to the second issue, these two machines, do they perform the same function? That's all: do they perform the same function?

Number one, the method of performing that function, and number two, if one machine takes a flat box, will the other machine?

But I don't know -- I don't want to know anything else.

But I assume here if they are made to take folded boxes, they are all flat. Would that assumption be right? There's no difference. If there were, you wouldn't be in this court.

MR. WYATT: The patent says that very thing, your Honor.

THE COURT: You wouldn't be in this court if there were differences.

MR. BERLINER: If there were differences.

THE COURT: Yes, you wouldn't be in this court.

MR. BERLINER: We say they are the same. They say there are differences.

THE COURT: I am arguing your case now. If there were differences, you wouldn't be in this court contesting them. You would have never sent the letter out in the first place to complain.

Do you understand what I am saying?

MR. BERLINER: Right.

THE COURT: That's what I'm talking about.

MR. BERLINER: They seem to think there are differences, though.

THE COURT: That's their case. You stop worrying about their case. Worry about your case.

MR. BERLINER: We have to show that they are wrong.

THE COURT: Of course you --

MR. BERLINER: No, we have to demonstrate it to you.

THE COURT: You see, you are demonstrating an awful lot of things to me. But one of the things you don't have to demonstrate to me is that these machines -- your claim is that they are similar and that they have taken your patent and used it on the basis of infringement, and used all the other parts with it. I understand that, and that's what I'm trying.

MR. BERLINER: Right, that's one of the issues.

The other issue is validity.

THE COURT: Sure. Well, that's what they all follow, infringement, validity, novelty -- it all comes down the line. You can get as cute

about it as you like, but it still always follows. I understand I have to follow all those three essentials. I know that. Don't repeat them again, I know it.

My decision will say, but I don't have to say it from the bench.

MR. BERLINER: I know, but just on the issue of validity. On the issue of infringement is how they correspond.

THE COURT: Prior art is something different. I agree.

MR. BERLINER: But now considering the weight to be given to the prior art, the fact that a prior art machine shows a sheet stacker doesn't mean it's necessarily applicable to a box stacker.

THE COURT: I understand that, too. That's your other type argument. But that is not what we're talking about at this moment.

We're talking about, at this moment, both these machines apparently do the same thing, they take a corrugated folded box and they feed from the bottom, they take it off, except the manner of taking it off is a little different with the

pivotal business involved and the slapper and the back plate, even the bicycle chains, and so on and so forth; or are they different in other respects so that there is no infringement? That's what we're talking about.

MR. BERLINER: That's the infringement, yes. But now they have shown you prior art, and in considering the weight to be given to that prior art, you have to remember that just because something does thing one, it doesn't anticipate a machine, two, that does things one and two.

THE COURT: I nunderstand that. I understand that the prior art is only being shown as to whether or not the various mechanical devices or nomenclatures that are used in one machine are not a usurpation of some rights of someone in this case. I understand that. In other words, you can take everything; a gear is a gear, a wheel is a wheel, a photocell is a photocell, you can't change that, a solenoid is a solenoid, a chain is a chain, you can't change that. Everything has to be made with these things. It's a question how you make it. I assume that's right? Is that right? It's about as simple as you can get. I'm

not an engineer so I've got to say it in what you call Costantino language, you know.

MR. BERLINER: What you have said is accurate to a T.

THE COURT: What?

MR. BERLINER: It's accurate to a T.

THE COURT: But my language, I'm sure, wouldn't fit into the Patent Office, because they'd take me and throw me out on my ear. That I understand, too.

Let's have a recess. We'll be back at 2:00 o'clock.

(Whereupon at 1:00 P.M. the trial was adjourned to 2:30 P.M.)

A F T E R N O O N S E S S I O N

(2:20 p.m.)

E D G A R B . L E H M A N , resumed and testified further as follows:

THE COURT: Proceed, please.

DIRECT EXAMINATION

BY MR. BERLINER (Continued):

Q Mr. Lehman, has the Shields concept of straightening box panels in a rising underfed stack of glued boxes been accepted by the box-making industry?

MR. WYATT: I object to that question, your Honor. There has been no evidence that the subject matter of this patent has ever been used anywhere. In fact, it is our position that it has never been used.

Until he establishes that,we believe his question is improper. I don't think there are two or three machines in existence that are in accordance with the claim of this patent, your Honor.

MR. BERLINER: Your Honor, the question merely talked about a concept of straightening box panels in a rising underfed stack of glued boxes.

MR. WYATT: I will withdraw the objection if he does not mean the patented claim subject matter.

THE COURT: I don't think he means that.

MR. WYATT: I will withdraw the objection.

A Yes, that concept has been fully accepted in the industry, in the corrugating industry, as the best way to handle boxes at the end of a folder-gluer.

Q How many Flexo folder-gluers utilizing underfeed stacker straighteners have been sold in the United States?

MR. WYATT: Your Honor, I have the same objection to that question. He has been using that term underfeed stacker straightener. If he has reference to the Shield's patent by that, we object.

There is no proof that there any machines out.

THE COURT: Are there any other machines out, outside of this one company?

MR. BERLINER: Yes.

THE COURT: Who?

MR. BERLINER: The plaintiff.

MR. WYATT: Your Honor --

THE COURT: You mean a plaintiff's similar

machine?

MR. WYATT: If you recall, when you went to Hencken's there was one of plaintiff's machines and one of the defendant's machines, and they said that that machine was not within the patent.

THE COURT: Which one?

MR. WYATT: The one next to ours.

MR. BERLINER: The belts.

THE COURT: You are talking about this one?

MR. WYATT: Right.

THE COURT: This one?

MR. BERLINER: You saw a machine at Enterprise. It didn't have belts.

MR. WYATT: That had spirals, your Honor, not this machine.

MR. BERLINER: Would your Honor like to hear about the spirals?

THE COURT: I don't want to get into another machine. All I want to do is get into this machine and no other machine.

Does anyone else have this machine, the Shields, outside of the S&S Company, do they?

THE WITNESS: Yes, your Honor.

THE COURT: Who?

THE WITNESS: The machine works equally well with or without the spirals. The spirals are not in issue as far as the machine's ability to operate.

THE COURT: I wouldn't say they were either because both machines operated. I don't dispute that.

We are talking about the nomenclature of the machines now, we are not talking about whether you add or subtract something.

MR. WYATT: All the machines that they have sold have the spirals and there are separate patents on those spirals.

BY MR. BERLINER:

Q Mr. Lehman, are you familiar with the S&S stacker straightener that is presently operating at the Enterprise Company in New Jersey?

A Yes, I am.

THE COURT: You don't claim that to be an infringement?

MR. BERLINER: It is our own machine. We do claim that it comes within this patent, absolutely.

THE COURT: The spiral one?

MR. WYATT: Yes. We say it is completely out of the patent, your Honor, and is covered by another S&S patent that has spirals.

THE COURT: I would not take that into consideration at all. That is not before me. I am not going to try a third machine. Why should I try a third machine?

MR. BERLINER: There is no reason to even consider that machine.

THE COURT: I don't want to hear about it.

MR. BERLINER: Up to this point.

THE COURT: I have enough trouble trying to find out what these two machines are doing without trying to find out what a third machine is doing.

MR. BERLINER: Mr. Wyatt brought it into the case?

THE COURT: When?

MR. BERLINER: Just now, with his objection --

THE COURT: He is pointing out that they don't have this machine in their factory.

MR. BERLINER: The spirals are removable and therefore certain types of operations you run the machine without the spirals.

Then it is this machine.

MR. WYATT: There is no evidence to that in this case, your Honor.

THE COURT: None whatsoever.

MR. BERLINER: If you like --

THE COURT: There is no evidence in the case that the spirals can be removed from another machine and it becomes this machine. That is not the problem.

The problem is whether this mechanism here is similar to the prototype machine that they showed in their factory that they have made, that's all.

MR. BERLINER: Your Honor, I believe that --

THE COURT: Whether they have taken your design and your patent and infringed upon it so it is not valid.

MR. BERLINER: I believe we have the right to bring out the acceptance of this underfeed stacker straightener concept.

THE COURT: The thing that bothers me in this case, I don't see why we have to go circumventing the entire issue that we have. We have one simple issue. Did these people -- I have said this all along now and I will say it one

more time, and all we do is talk about everything except what we are supposed to talk about in this case: Did they take this machine, and with the novelty and everything else that is involved in this machine, make a machine that they are using in their factory so that they infringed upon your patent and with all of the novelties attached and the prior art have made the new machine you claim and used that new machine in their factory; that's all.

I don't want to know about anything else, and I keep saying that. I am not trying another thing in this case, not trying it. I think you are circumventing the entire issue, trying to becloud the issue and you shouldn't be doing it.

MR. BERLINER: I am very sorry that that's --

THE COURT: That's how I feel about it because I tried to get down to the main issue and every time I do we are off on something else again.

MR. BERLINER: If the plaintiffs had not raised the issue of validity we wouldn't be on this issue, your Honor.

THE COURT: That is one of the things they should raise. They have three things: infringement,

validity and prior art. They must raise those three items.

MR. BERLINER: We have to uphold the validity. One factor that may tend to indicate validity is acceptance by the industry.

THE COURT: This is not the only underfed machine in the whole industry. We have had several that are underfed. We have a whole book full of prior art underfed machines.

MR. BERLINER: Not stacker straighteners.

THE COURT: One of the arguments is that this is a particular peculiar underfed type machine, as I understand the argument. Is that not so?

I can disregard the underfed part of it then?

MR. BERLINER: Not disregard the underfed part. It is a combination --

THE COURT: We have to --

MR. BERLINER: -- a combination of elements where you have an underfed stack and while that stack is rising you are performing a straightening operation on boxes that are not completely glued.

THE COURT: There is also that in prior art where they have shown straighteners in other

machines.

MR. BERLINER: They haven't shown a straightener in that setting. That is part of the novelty. We have a combination claim which must be looked at in its entirety. The plaintiff is trying to break it down into elements --

THE COURT: From what I have heard --

MR. FABER: May I add something brought up by Mr. Wyatt?

THE COURT: Yes.

(Continued on next page.)

MR. FABER: Up there you see a claim. That claim calls for, I'd say, four items --

THE COURT: Whoever wrote that claim repeated a sentence twice. I don't know if anybody else noticed that, they say "between which the blanks," and "between which the blanks" --

MR. BERLINER: It was the printer.

MR. FABER: The essence, and Mr. Wyatt well recognizes this, if I have a claim that covers a locomotive, freight car and caboose, a train that has a locomotive, freight car and caboose, and also a diner, a passenger car and a Pullman car, and a work car will infringe that claim, then -- any of our stacker straighteners on the market that has the feed-in, the slapper plates and the stationary plate, the pusher off the top which is mounted for limited vertical movement, and in addition has an Indian wigwam on it or a tent or a spiral or something else, that would still come within, as long as it had one, two, three, four, would still come within it. So it is unfair and not correct at all to say if it has a spiral it doesn't infringe.

THE COURT: I didn't say that.

MR. WYATT: We say that, your Honor.

MR. FABER: I have not finished yet.

We simply say that when you use those four elements, and we do in every one of our machines, that is the concept we are using. Leave out one of those elements and we don't even come near the concept, it's those four.

If somebody else uses those four --

THE COURT: You will concede, however, that we have in the prior art book machines that are feeding from underneath; we have machines that are taking from the top and stacking from bottom to top; we have machines that have spankers in the prior art.

If that is your argument, then we are wasting our time in this Courtroom. Then the novelty of it is completely out on a prior art basis.

MR. FABER: That is something the Court may --

THE COURT: The only thing I think the issue is in this case is the fact whether or not this machine is so constructed that all of the prior art,

with all of the conglomeration and the nomenclature placed into this that it makes it absolutely unique so there will be an infringement, and that is what I am trying to hear, and I hear everything but that so far, everything but that. I hear the boxes being made and everything else.

I even got involved in the box business for awhile because I wanted to see whether I can wipe it out.

MR. FABER: There is a reason for that.

THE COURT: Somehow or other I am not getting an answer.

MR. FABER: Is the patent invalid? Is it infringed? That is the --

THE COURT: We keep saying the same thing but we don't get an answer.

MR. FABER: Validity and infringement are two different questions.

THE COURT: Of course they are.

MR. FABER: Because somebody else showed a cold pusher and a stacker for metal plates, and somebody else showed a right-angle pusher, the Court has to decide whether it is valid over those.

One of the criteria that the Court does use to decide that, among other things, on the question of obviousness, is the acceptance of the machine.

If we built a machine and nobody paid any attention to it, that might influence the Court, the industry didn't give a hang about it.

But if the industry did give a hang about it and it solved a problem, that, too, might influence the Court. Legally it could influence the Court.

The Court decides whether it lets it influence it, and we try to tell the Court that we have sold about half of the machines ever sold, and we sold them solely because of the Shields understacker.

These machines sell for two hundred and twenty-five thousand dollars apiece, and we say that every one of them, every one of them met that claim, whether it had spirals or wigwams or was painted red or white or blue, but it had every element of the claim. Then there is acceptance.

Now the Court can decide to disregard that

evidence, it has the right to do so, but it also can use that evidence. That is Section One.

Then they go on to whether they infringe or don't infringe, and that is Section Two. This witness is simply being asked to give some real testimony as to the acceptance of the machine, and that's all.

THE COURT: But he hasn't given any of that testimony for where I sit.

MR. FABER: We are asking him now.

THE COURT: There hasn't been any question to this witness as to the functional purpose of this machine as compared to the machine that the plaintiffs are talking about, not one question in a day and a half now he has been on.

Some of the questions he didn't understand himself, and I didn't understand them. I want to know, and I think I have a right to know, the functional purpose in similarity of this machine and the infringement, the validity, the prior art and the validity, any way you want it.

Let's hear the questions.

MR. FABER: This witness is here --

THE COURT: You can't disagree with that

statement I have just made. I have not heard any, unless you are sitting over there an hearing it.

MR. FABER: That is not because this witness is supposed to tell you, we have another witness here.

THE COURT: Then we don't need him, if that is the case.

MR. FABER: This witness is here to tell you something that we believe in order to help you reach a decision you ought to know.

The reason this machine came into existence, what it did and how well it was accepted. When he is done, there is another witness that will go on.

THE COURT: I don't think that is at all the functional purpose of the issue in the case, what you are telling me now. I think that is circumventing again what we are supposed to be trying here.

MR. FABER: I am following Graham against Deere.

THE COURT: I don't care who you are following. From the case I am listening to, we

are circumventing the strict issue I am supposed 411
to follow and find.

He is testifying to everything but the functional purpose of this machine as compared to the machine that is being contested.

MR. FABER: We have a witness for that.

THE COURT: Put him on.

MR. FABER: He is to give you the background that we feel is part of the necessary record in this case.

MR. WYATT: Your Honor, the heart of our objection, which I think -- it is that this man is attempting to state that he can say that Claim One covers all the devices S&S are selling with these spirals.

He is incompetent to make that statement.

THE COURT: You mean incompetent in quotes?

MR. WYATT: I mean incompetent in the sense that he is not a lawyer. He is certainly a very competent person. I meant as an attorney.

He is not a patent lawyer, and whether or not -- if they say that all their devices have the spirals, he can say that. But for him to say that all of the sales of S&S devices are the patented

concept that they are selling, your Honor, we object to that.

MR. FABER: That is very easily answered, your Honor.

THE COURT: How come the witness doesn't answer these questions?

MR. FABER: I can ask him four questions and then you decide whether those machines, at least, fall within that scope.

THE COURT: You are talking about a machine with spiral listers on it now, and that is not before me, number one.

In order for it to be similar to the machines we are talking about, you say you must remove these spirals, it can be modified to fit into the nomenclature of this machine.

It may be, but there are thousands of machines you can do that to, thousands, and I am not going to try those machines.

MR. FABER: That is not the point, your Honor. The question is whether the machine has the four elements called for by the claim. No matter what else it has, if it has those four elements, it falls within the claim, that's all.

It's the example I gave, the locomotive --

THE COURT: Why must I worry about those when I need not do that, when I must find out whether these are the two infringements?

MR. FABER: We are saying to you that this witness is going to tell you that our folding machines were sold because the stacker straightener was on it and each one had those four elements. That is a piece of evidence that is useful and pertinent in this case.

THE COURT: You must have -- you must admit that other machines have likewise had stacker straighteners.

MR. FABER: They don't have the stacker straightener that satisfies --

THE COURT: That is for me to decide, whether the prior art has been violated.

MR. FABER: That is a question of validity, and your application of validity --

THE COURT: Sure.

MR. FABER: Your application of --

THE COURT: You seem to want the Court to say, well, this is the only one that has a stacker straightener, therefore any other machine that has

it is improper, invalid, infringement and also violates prior art; that's what you want me to say. I can't say it from his testimony.

(Continued on next page.)

MR. FABER: I am not saying that at all.

THE COURT: I am discussing testimony. We are not talking about the same thing. What you would like to tell the Court and what he must testify to are two different things.

MR. FABER: Your Honor, the question of validity is simply one of whether the prior art, which shows individually one element in each patent, can put put together to meet this and say it was no invention.

The question of infringement is simply whether that machine over there in Exhibit 3 or 5, whether that meets the claim.

THE COURT: I know.

MR. FABER: You are given two kinds of information to help you make a decision, one, as Mr. Fischer testified, the prior art --

THE COURT: But not on the question has underfeeding been accepted in the industry. We know it has been because prior art shows it has been.

MR. FABER: No.

THE COURT: No?

MR. FABER: The prior art does not show it

has been.

THE COURT: No? What have we been looking at?

MR. FABER: Underfeeding is one of the four elements of that claim. It is the combination that does the job. Underfeeding for heels that come up through a die, through a flume or underfeeding for a piece of metal blank without any of the other elements is like saying that somebody invented a bicycle, therefore a locomotive is invalid because it's got a wheel.

THE COURT: What about the leather goods that are cut and put through a chimney, it's still an underfeed system; I don't know whose invention it was, but --

MR. FABER: It was somebody else's invention.

THE COURT: Is it novel and has it been violated?

MR. FABER: One of the elements of novelty, where you don't have a prior patent that has all of the many elements of the claim in that one patent, then you go on that Section 103 of the Patent Act in which you must say it is obvious over the prior art or not obvious over the prior

art.

When you are going into the question of whether, when one reference shows element A and one reference shows element B and one reference shows element C, you can say it is obvious over the prior art because it is obvious to put them together, or you can say it's not.

One of the criteria, and only one of them, that you use besides your own analysis of your own thoughts on the matter to help you in that is, was the invention accepted? Did it have commercial success? Did it solve a problem. That is not a dispositive element, but it is one of the elements that tells you, if all of the individual elements of the invention --

THE COURT: I would --

MR. FABER: Let me just finish this thought.

If all of the individual elements of the invention were present in the prior art individually for 10 years, the need existed, it was not put together, that helps you say it was invention.

You can also say despite that you don't consider it invention. You can do that too.

There was an AMP case where the Supreme

Court said it was all new, all new, and we say how can that be invention, there is a little bar with a wooden handle that pushed like this. They didn't need to go even to the prior art, they went into their own minds and said,"It's stupid to call this thing invention." You can do that, but we are entitled to give you, as part of the record, this acceptance. We don't have to say to you that it has spirals or didn't have spirals. What we have to say to you, we simply ask the witness did it have A, B, C, D of the claim? If all of our devices did have those four elements, and we sold 300 out of the 750 that were bought in the last 15 years, that tells you something.

THE COURT: Was the spiral machine made before this machine or after?

MR. FABER: The spiral machine is an improvement for specific purposes,but if it has these four elements then even if it has a spiral and little people running over it and a merry-go-round, it still infringes.

THE COURT: If it is only an improvement of this machine, what difference does it make if they are using a spiral and they sold it to

him?

MR. FABER: I feel, and I am sorry to say, that the objection was raised based on a concept that is prevalent among non-technical people. You have a patent on one thing and it is outside the patent on another.

That is not so. You get a patent on this, then you can get a patent on a particular kind of --

THE COURT: I don't believe that.

MR. FABER: But it's true, it's true. You get a patent on the telephone and then somebody has -- like Mr. Bell got a patent on the telephone. Somebody gets a patent on a variation of the carbon mike used in the telephone, he's got his own patent --

MR. WYATT: May we discontinue the argument because --

MR.FABER: Unless he infringes the earlier patent, because the earlier patent calls for a combination that is broader.

That happens to be the way things are, we are not making this up. I am afraid if you ask Mr. Weiss straight he will have to tell you

it is so.

THE COURT: If he asks him do they have an underfed machine by our company at this time, the answer is yes. What else do I need? If he says is that a modification of this claim? The answer is yes. What else do I need? Do I need a full description of it?

MR.FABER: No.

THE COURT: No?

MR. FABER: Mr. Wyatt said he is not going to let this witness do interpreting. All we have to do is ask this witness, does every S&S machine have these four elements?

THE COURT: That's all.

MR. FABER: All right.

THE COURT: Fine.

MR. FABER: Then how many of them were sold, in what field and how much, and we have told you the story. That's all we want to do here.

THE COURT: You can do that.

MR. WYATT: May I ask this, the issue here is, as I understand what Mr. Faber is attempting to do, is to show commercial success. If

your Honor finds that the question of unobviousness is in the balance, then as a secondary consideration your Honor can consider commercial success.

MR. FABER: That's correct.

MR. WYATT: However, the Second Circuit is very strict in that when in order to show commercial success the defendant must show that it was actually selling the patented machine. They have never sold this machine, your Honor, they have sold a spiral machine that does not come within these claims.

In order for this witness to interpret these claims --

THE COURT: Which is a modification --

MR. WYATT: This witness is competent to tell what they sold, namely, a machine with spirals and paddles and so forth. But for this witness to say that those machines came in with these claims, we would object to that because he is not competent to testify to that.

MR. FABER: I am not asking that.

THE COURT: But he is asking him that question.

MR. WYATT: He was asking that question.

MR. FABER: We are going to ask four preliminary questions -- may we?

THE COURT: Sure.

MR. FABER: All right.

DIRECT EXAMINATION

BY MR. FABER:

Q Did every in-line stacker straightener sold by S&S have the following elements: a conveyor operable --

MR. WYATT: I object to him reading the patent claims to the witness.

MR. FABER: I am trying to paraphrase.

THE COURT: It is faster this way.

Q A conveyor operable in synchronism with the machine to move the blanks in a first direction and a device above the conveyor to intercept and accumulate the blanks issuing from the machine to form a blank stack which is fed below; did every one of the S&S stacker straighteners have that?

A Yes.

Q Did every one of the stacker straighteners sold by S&S with folder-gluers, did every one of them have a pair of plates transverse to the direction of motion of the blanks between which the blanks may be accumulated?

MR. WYATT: I object to the question,

your Honor.

May I mark as Plaintiffs' Exhibit 27 an admission on the part of the defendant that they do not have that part?

THE COURT: That is why he didn't answer it. They do not?

MR. FABER: I will ask it another way.

THE COURT: You don't have it?

MR. WYATT: There is an admission right in the record, your Honor.

THE CLERK: Letter dated November 19, 1971 marked for Identification as Plaintiffs' Exhibit 27.

(So marked.)

MR. WYATT: It is a letter to me from Mr. Berliner.

MR. FABER: It is Mr. Shields' belief that this Hencken's machine straightens the boxes by using lifting belts for engaging the leading and trailing edges of the stack.

If this is the case, then the S&S machine at Hencken's does not come within the purview of the patent in suit.

THE COURT: That's what it says.

MR. BERLINER: Your Honor --

MR. WYATT: That is only one of many reasons.

MR. BERLINER: May I bring to your Honor's attention the fact that you saw that machine and it did have lifting belts?

MR. WYATT: How can every machine have the elements of the claim as represented by their lawyer. It can't.

MR. FABER: Maybe he will say yes and maybe he will say no. Why don't you let the witness ask the question? Don't you think he should answer?

MR. WYATT: It is up to the Court and not me, Mr. Faber.

(Continued on next page.)

BY MR. FABER:

Q Did every machine, every stacker straightener sold by S&S have a pair of plates transverse to the direction of motion of the blanks between which the blanks might be accumulated, did every one of them have it?

A Not one hundred percent. Probably about 90 percent.

Q How many is 90 percent.

A Ninety percent would be in the area of 300 or just below.

Q And the other 10 percent did not have those two plates?

A That's correct.

Q And one of those two plates abut the trailing -- did every one of those 90 percent have one of the plates which abuts the trailing edge of the blank in the stack periodically reciprocally moveable to apply a straightening force to the blanks, did every one of those 90 percent have that, the slapper plate?

A Yes.

Q And was there a passage or opening under that slapper plate to permit the entry of at least one blank at a time in that 90 percent?

A Yes.

Q And above the upper end of the plates, and at

the top of the stack, did every one of those 90 percent have a longitudinally moveable plate for periodically pushing a top portion of the stack of the blanks from the accumulating device?

A Yes.

Q And did every one of those pushers in those 90 percent have means for supporting the pusher plate so that it remained in a substantial vertical position when in contact with the blank stack?

A Yes.

Q And did every one of those 90 percent --

MR. WYATT: May I have a continuing objection to this line of testimony? Thank you, your Honor.

Q Did every one of those 90 percent have a pusher plate which was mounted so that it could move vertically relative to its support means?

A Yes.

Q And in every one of those 90 percent was the stack -- could the stack be fed with blanks as the moveable plate is moving across the top of the stack?

A Yes.

Q All right. Now, how many folder gluers have been sold in the United States in total for the last -- you

pick the period -- 15 or 20 years, by everyone?

A Approximately 750.

Q And in that same period of time how many folder gluers with the blank stacking straightening device of Al Shields have been sold in that same period?

A Over 300.

Q And 90 percent of those had the stacker-straightening device that we have just described in detail?

A Yes.

Q Now, presently what do each of those folder gluers sell for as a total machine?

A About 225 to $240,000.

Q And what is the relative proportionate cost, price or value -- take one of those -- of the stacker straightening end of that folder gluer with respect to the rest of the folder gluer?

A About 20 percent.

Q Among all the manufacturers of a complete line of corrugated machinery, S&S is one of them, who are the other manufacturers of complete lines of corrugated machinery?

A There are only two other in the United States, and that is Koppers and the Harris Intertype Corporation, also a very large public corporation.

Q Both of which are large conglomerates?

A That's correct.

Q Did you testify S&S has about 500 employees?

A That's right.

Q Now, you are the Vice President of Sales of S&S?

A Yes.

Q Do you have any knowledge of what is demanded and what is required by the box makers in the industry?

A Yes. What is demanded is a good investment in machinery in order to make a profit and survive. To do that, the machinery which is installed has to be operating, capable of operating at highest efficiency. That is what we have attained with this device that we are speaking about compared to other devices such as the right-angle stacker, which existed before.

Q What does that difference between the right-angle stacker and this device that we just specifically described in terms of rate of production or saving to the manufacturer of boxes mean?

A The rate of production difference can be -- normally is about 10 to 20 percent. It can imply or it can actually require, and often does require an extra person on the right-angle device, as shown on Exhibit B, in actual use in the plant.

The difference to the user per year can be anything between 20,000 to 50 or $60,000 a year in operating cost, depending on how many shifts he runs, what kind of production he runs. But it is a very large figure.

Q What is the usual number of shifts per day today in the corrugated box industry?

A Two extended shifts, sometimes three shifts.

Q You mentioned previously something about the value of straight-line operation. Is that merely a saving of a few thousand feet of floor space which might be enough, is it merely that?

A No. The big difference is in the operating characteristics of the machine as a result of the underfeed stacker facility.

Q As far as the box maker is concerned, his output is these two tubular boxes in bundles as delivered from the stacker, is that right?

A That's correct.

Q In back of that folder gluer and stacker he has got other machinery, is that right?

A Yes.

Q And a complete box maker with a corrugating cutoff slitter, scorer and the steam plant he needs for it, and the warehouses for the mill rolls, what is his investment?

A His investment in a total corrugating plant today, the total assets in use are between four and five million dollars.

Q That is for one corrugator?

A One corrugating plant.

Q At any point, if any element is moving slower than any other element, you have got a slow-down in output, is that right?

A It could choke up the plant and slow down the output.

Q So that is it fair to say that any increase in output of the folder gluer permits a corresponding increase in output of four or five million dollars of equipment back of it, is that right?

A That's correct.

MR. FABER: That's all.

THE COURT: All right.

CROSS-EXAMINATION

BY MR. WYATT:

Q Mr. Lehman, I apologize, I didn't mean to mention that you were incompetent. As a patent attorney you were not.

Mr. Lehman, can you tell me how many blank stacking straightening and delivery devices have been sold by S&S that have the particular mounting shown here in Plaintiffs'

Exhibit 1-B, namely, with a single plate 90, with a pusher that rolls up and down on it like that; how many?

A I am not an expert on patents, but looking --

Q You are an engineer, are you not?

A That's correct.

Q And it is axiomatic in patent law that patent specifications including the drawings are directed to those skilled in the art, and you are indeed skilled in the art, are you not?

A Yes.

Q Then, looking at that drawing --

A I am not skilled in the art of machine design as a basic --

Q You are not skilled in the art of blank stacking straightening and delivering devices, sir?

A Yes, I am.

Q Will you tell me how many you have sold that have this device shown here in figure 2, Plaintiffs' Exhibit 1-B, please.

A I believe all of them.

Q All of them have a plate 90, is that correct, like that, just like that?

A In shape or in --

Q It looks exactly like that drawing, sir?

A Exactly like that drawing?

Q Yes.

A I don't know.

Q What do you mean you don't know? Do they or do they not look like that?

A You are asking me whether the plate on the Shields' design has the exact shape of plate No. 90, and I would say I don't know if it has exact size and shape.

Is that what your question is, or did I not understand the question?

Q Let me restate it again so that you do indeed understand my question.

My question -- let's start out this way -- how many of your devices that you have sold as understackers have a single pusher as shown here in figure 2, just a single pusher of any type? Just a single pusher of any type? How many?

A I don't know what you mean by a single pusher. A pusher like that?

Q One pusher rather than two, that's what I mean by single.

A All of our machines have a single pusher.

Q All of your machines have two pushers, don't they, a pair of pushers?

A It's one pusher.

Q But there are two parts to it?

A Oh, yes.

Q Oh, yes. How many have a pusher with one part to it?

A None.

Q None. How many have you ever sold with one part to it like you are showing in the patent drawing here?

A Are you referring to the pink parts or the orange colored parts?

Q I am referring to figure 2, the whole thing there, how many have you sold that have that pusher?

A That have the pusher 90 plus the pink part as one part, none.

Q Just the way it's shown. Isn't it true you sold at least one initially to a company in Brooklyn, or you don't know that you sold a device like this one and it was modified right after that?

A No, I don't know that.

Q You didn't read Mr. Shields' deposition?

A I read Mr. Shields' deposition. I don't recall from it. I would like to read it again if I am permitted to.

(Continued on next page.)

S/td 2/1

MR. WYATT: Now, would you please mark as Plaintiff's Exhibit 28, a copy of a patent to Shields, 3,063,577.

THE CLERK: Marked as Plaintiff's Exhibit 28.

(Document referred to being a copy of the patent Shields 3,063,5577 referred to was received and marked Plaintiff's Exhibit 28 for identification.)

MR. WYATT: And as Plaintiff's Exhibit 29, a Shields patent number 3,409,148.

THE CLERK: Document marked for identification as Plaintiff's Exhibit 29.

(Document referred to being a copy of Shields patent number 3,409,148 referred to was received and marked Plaintiff's Exhibit 29 for identification).

Q Now, Mr. Lehman, I hand you the two patents that have been marked as Plaintiff's Exhibit 28 and 29, and I ask you, have you seen copies of those Shields patents before?

A No, I havent seen either of these before.

Q You are primarily in sales?

A In my function today? Yes.

Q Therefore, you would not know about the Shields patents because you are not permanently involved in engineering?

A In engineering design? That is correct.

Q So you don't know whether or not your patented items are being used commercially, in other words, the subject matter of this Shields patent was actually being used ?

Is that correct? You would not know?

A As a general practice, no, except since I have been asked to testify, I have certainly reviewed as to the patents -- or the patent applicable here.

Q Now, again, I want to go back and refer you to the patent in suit. And again I would like to refer you to this figure two.

Now, if I understand your testimony, you know of no device that has ever been sold that has this type of plate, Backing Plate 90, with a sliding pusher plate as shown here in this figure two? Is that correct?

MR. FABER: Your Honor, the same objection Mr. Wyatt made to Mr. Lehman's interpreting the patent during direct applies now.

He is perfectly free to ask him questions which are based on the patent. But if he doesn't think Mr. Lehman is able to interpret the patent on direct, he is not able to do so on cross.

THE COURT: That is not interpretation. He is asking him if that is so.

MR. WYATT: Your Honor, a claim of the patent

is one thing but the drawing and the description are directed to one skilled in the art.

THE COURT: He can answer that.

Q Do I understand it is not sold with that type of pusher?

THE COURT: As far as you know.

A That is a single piece made out of the one piece? Is that your question?

Q That is correct. First you tell us you never sold one that had just had a single pusher that went along, is that correct?

A Yes, that is correct.

Q This is the second question. Have you ever sold one that was constructed like that with the plate 90, with this sliding plate with these rollers that slide up and down on that plate 90 (indicating).

A We have sold all of our machines with the -- of the style that you have shown.

Q By style -- what do you mean by style? It is not the same as this (indicating)? Is that right? It is different? By style, do you mean a different style?

A The style is the same then with the plate and the sliding members. I can tell you that. Whether it is exactly the same shape, any or all of them, I cannot tell you.

Q Well, doesn't look anything like that, does it? (Indicating).

A Yes, it does.

Q It looks like that? Okay. Then I ask you to turn them to Plaintiff's Exhibit 29 -- I am sorry -- yes, Plaintiff's Exhibit 29 that you have in front of you, and turn to the third page therein, if you would, and particularly reference 6 and 6A or figure 6 and 6A.

A This is which sheet? Will you show me?

Q Surely. The third sheet of drawings. You have one, two, three on there(indicating). You will find -- do you have the right one? There it is. It is on the fourth sheet, 6A and 6. Would you look at them, and will you tell me what is depicted there?

A The picture on the left?

Q That is figure 6A.

A That is correct. At the bottom, it looks like the bottom part of the pusher.

Q You are saying that is the same as this 92? Is that what you are saying? That that bottom part which is marked 85 is the same as 82? Is that what you are saying?

A To me, who is not versed in patents, it looks to be a similar principle.

Q What other part is there in there?

A I don't understand what you mean.

Q I am sorry. What else in there do you recognize in figure 6A that you see here in this figure 1B of the patent drawing? Do you see anything else that looks the same?

A I see one piece which seems not to move vertically. And the lower piece which seems to move vertically.

Q What piece does not move vertically?

A The upper piece which is directly above the lower piece, which is marked No. I guess, it is 85.

Q And is this the type of device that is embodied on the commercial machines beingsold by S&S, by the commercial blank stacking and straightening delivery devices, the type shown in this Plaintiff's Exhibit 29, figure 6A and 6.

A At the bottom end there, it has a similarity yes.

Q Well, I am asking you, do you know or don't you know what you are selling? Is that the type of pusher you are selling?

A Well, in selling, we don't discuss the nature of the pusher.

Q I don't care what you are discussing. I would like to know what you are selling and what you have sold.

A You asked me whether I knew what I am selling and I am explaining to you that --

Q Maybe I wasn't clear. Let me be clear. Do figure

6 and 6A depict the type of pushers on your devices sold by S&S, the blank stacking , straightening and delivery devices sold by S&S, sir.

A That collapsing part looks similar to it.

Q What about the rest of the figure, six and six A? If you don't know, say you don't know.

A I don't know.

Q You don't know what type of pusher plate is being sold by S&S on the machine, is that correct?

A No, I don't know the attachment about which you asked me about.

Q Well, please describe them. If you know, will you please describe what the attachment is like?

A No, I said I didn't know.

Q Now, I ask you to turn to Plaintiff's Exhibit 28, and I ask you to turn to figure 2 --

MR. WYATT: And in figure 2, your Honor, Plaintiff's Exhibit 28 is the spiral device, Shields spiral device, that we saw out at Enterprise.

Q (Continuing) Can you tell me if all your machines that you sell have similar type spiral construction that raises the stacks as shown in figure 2 of Plaintiff's Exhibit 28?

A Well, if I have a few seconds to look at it.

I would say similar.

I don't know if they are 100% the same.

Q The devices you are selling today all have the spiral lifting mechamism, do they not?

A Yes, that is correct.

Q Do you know of any blank stacking, straightening and delivering device that has ever been sold by S&S that does not have that spiral?

A Yes, I believe some of the earlier machines.

Q Did not have the spiral?

A Yes.

Q How many? Four?

A I don't know.

Q Two?

A I don't know.

Q You don't know?

A I would think many more.

Q Well, if you know, tell us.

A Well, I don't know. If I would have to give a guess, -- I don't know whether I should guess if I don't know -- but certainly more than a few.

Those spirals are removable for certain uses, you know.

Q But they all have the spirals on the machines, nevertheless?

A Yes. Correct.

MR. WYATT: Excuse me, your Honor. May I just consult with counsel?

Now, would you please mark as the next Exhibit which I think is 30, Shields patent number 2,963,177?

THE CLERK: Marked for identification, a diagram, Plaintiff's Exhibit 30.

MR. FABER: May I suggest that the patents be marked in evidence? They don't have to be marked in identification.

THE COURT: Yes, all right.

THE CLERK: Marked in evidence as Plaintiff's Exhibit 30, a diagram of Shields patent 2,963,177.

(Document so marked in evidence.)

MR. WYATT: And Plaintiff's Exhibit 31, a copy of Shields patent, no. 3,203,561.

THE CLERK: Marked in evidence as Plaintiff's Exhibit 31, a diagram of Shields Patent 3,203,561.

(Document referred to being a diagram of Shields Patent No. 3,203,561, marked in evidence.)

MR. WYATT: And Plaintiff's Exhibit 32, this last one, your Honor, a copy of Shields Patent No. 2,931, 520.

THE CLERK: Marked in evidence as Plaintiff's

Exhibit 32, a copy of Shields patent 2,931,520.

(Document referred to, being a copy of Shields Patent 2,931,520, referred to was received and marked Plaintiff's Exhibit 32 in evidence.)

MR. WYATT: We offer also into evidence, your Honor -- I believe we didn't get in 28 and 29.

And we offer them at this point.

MR. FABER: No objection.

THE CLERK: And how about 27?

MR. WYATT: And 27.

THE CLERK: Plaintiff's Exhibits 27, 28 and 29 previously marked for identification, now marked in evidence.

(Documents referred to having previously been marked for identification, now marked in evidence.)

Q I hand you Plaintiff's Exhibit 30, 31 and 32. And can you tell me, do you recognize these Shields patents? Have you seen them before, the devices therein? Have you seen them before?

A Before looking at them, I can tell you that I have never seen any of them before.

Q Do you know, looking at the drawings of those three Exhibits, can you tell me if any of the Shields understackers have incorporated any of those alleged improvements

or inventions in the understackers?

THE COURT: We will take a five minute recess.

(Short recess.)

(Continued on next page.)

td/3/1

MR. WYATT: Will you please mark as the next Plaintiff's Exhibit, 33, a Shields patent, No. 3,601,265, and I offer that in evidence.

MR. FABER: No objection.

Q Now, I have a few very short questions for you, Mr. Lehman. You have an engineering degree, is that correct?

A That's correct.

Q And you have a Master of Science Degree in Industrial Engineering?

A That's correct.

Q And you work in the field of blank stacking and straightening and delivery devices, is that correct, in that art?

A In that art.

Q Right. And Mr. Shields works in that art, also, does he not?

A That's correct.

Q And what education does Mr. Shields have? Is it an ME degree and an MS from Stevens Institute, is that correct?

A I'll tell you in a minute, if you will let me.

Q I am asking you yes or no. Does he?

A Yes, and a doctor's degree.

Q A doctor's degree from the University of West Berlin, does he not?

A Correct.

Q I'd say that's rather a high level of education, would you?

A Yes.

Q And I say you are quite an intelligent and educated man, are you not?

A Thank you.

Q And are you not highly skilled in this art?

A In the art of patents?

Q NO, in the art of blank stacking and straightening devices?

A Yes.

Q And your Mr. Pflaum, he is the president of your corporation, isn't he?

A That's correct.

Q And he also has an engineering degree, does he not?

A Yes.

Q And he is skilled in this art, is he not?

A Iwould think so.

Q And do you know Mr. Ley, who was at Universal?

A Yes, I know him.

Q And do you know that he also has an engineering degree from Columbia?

A I didnt know that.

Q You didn't know that?

A I believe it, surely.

MR. WYATT: Well, would you stipulate that Mr. Ley has an engineering degree from Columbia?

MR. FABER: I so stipulate. I think he has a better degree: He went through S&S once.

MR. WYATT: The purpose of this is to show the level of this art, your Honor. It's not someone who is just fooling around in the backyard. This is a highly skilled art.

Q Now, can you tell me how many of the devices that you sold, this number that you gave us, three hundred, I believe -- You said there were about 750 sold altogether in this field of folded gluers?

A There were about 750 folded gluers --

Q Sold, -- right?

A (Continuing) --sold in the United States.

Q Now, tell me how many understackers did you sell apart from folded gluers, where they weren't tied to the folded gluer?

A For another industry?

Q Anywhere, at any time ever.

A Other than on a folded gluer for corrugators, for corrugated board, we've never sold any understackers, to my knowledge.

Q Isn't it true, you always sell your understacker with a folder gluer, isn't that correct?

A That's correct.

Q And it's your company policy only to sell the patented understacker with the folded gluer, isn't that correct?

A That's incorrect.

MR. WYATT: Would you stipulate that the president of the company testified on his deposition that it was the company policy not to sell the understackers, other than when they were sold with the folded gluer?

MR. FABER: I will stipulate that you can put that in evidence if you wish. I don't recall the exact words. If you want to read it, it's all right.

MR. WYATT: Well, we'll find it, then.

MR. FABER: Or you can introduce the whole deposition and save time.

MR. WYATT: The point of this, your Honor: They

tied in their sales of the understacker with the folded gluer.

THE COURT: You say its in that book?

MR. WYATT: Yes, sir.

THE COURT: All right, if he says it.

MR. FABER: Why don't we put it in evidence?

MR. BERLINER: Your Honor, he's got a new issue now about tying in sales.

I would like the whole deposition to go in.

MR. WYATT: We'll put it in, your Honor.

THE COURT: Sure.

MR. WYATT: I don't have the original, but may we have the original marked as Plaintiff's Exhibit 34.

MR. BERLINER: It's been filed.

THE COURT: We have it.

We have it as part of the papers. Okay.

MR. WYATT: Of Mr. Pflaum.

THE WITNESS: Excuse me, you asked me was it company policy; is that correct?

Q Yes.

A It was not a company policy. It can be a sales policy and it can vary, depending on a number of factors.

Q We are over that issue, Mr. Pflaum has so

testified, and he is the president of your company. We are going to go on to another issue, if I may.

Now, would you tell me how many understackers you have actually sold? You testified about selling folded gluers; how many understackers did you sell?

A We sold the number -- the same number of understackers as folded gluers,plus one.

Q Plus one. And that one was the one separate sale to Canada?

A That's correct, in 1968.

Q Right. And that's the only separate sale of an understacker that you are aware of apart from a folded gluer?

A Apart from an S&S folded gluer.

Q Yes, folded gluer?

A That's correct.

Not by intent, that's just the way it works.

Q What is the total number of understakcers you sold?

A Excuse me.

Q Just so I understand, how many understackers did you actually sell?

A In the area of something over 300.

Q Right. You have already told us the ten percent

of those had belts, which were lifting belts used for engaging the leading and trailing edges, in order to straighten the stacks.

How many of the devices you are selling now have rather than plates up in front, in back, as shown in the patent -- See this plate up here, 37?

A Yes.

Q And that plate back there, 20?

A Yes.

Q How many have belts that move, rotate up and down?

A The machine has gone through a transition --

Q Yes.

A (Continuing)-- and we find at this time, that it was wiser to go back to the original plates, and we therefore don't supply the belts any more now.

Q But you were selling -- How many of those three hundred had belts on them?

A I think about ten percent.

Q No, you misunderstand my question. I am saying-- I am talking about the 90% now, and I am talking about not belts for straightening, I am talking about where you have your spiral and up in front you have a belt that helps the plates rise.

A Yes. About ten percent of those we sold had the rising belts, either with or without the spiral combination, as was observed by his Honor on the visit to Hancken.

Q What was --

A 90% are without the vertical rising belts.

Q But almost all that 90% has the spirals, is that correct?

A Yes, most of them.

MR. WYATT: I have got no further questions, your Honor.

THE COURT: Any other questions?

MR. FABER: Yes, may I have some redirect.

REDIRECT EXAMINATION

BY MR. FABER:

Q You were asked about this single pusher plate, if you recall. Now, in the corrugated industry, when you have a pusher plate, is it or is it not common when you have to cover a wide width, to use something to act as a pusher plate but that looks like other than a plate?

A Yes, because if you have to have a big plate, it's heavy to cut out.

A bit part of a big plate is economically not the best way to do it. It is better to take separate pieces and bolt them together as if it were one plate.

Q So that when you have several bolted -together pieces, do you in such a case have a longitudinal plate for periodically pushing the top portion of the stack of blanks from the accumulating device?

A Yes.

MR. WYATT: I object to this question. It's asking a layman to interpret the claim language, your Honor.

THE COURT: As long as we get over it, I don't care what he asks.

All right, much easier.

Q Do you remember the question? I don't.

A Would you reread it, please? Sorry to have to ask you that.

(Last question read.)

THE WITNESS: Yes.

MR. FABER: On the readback the word "moving" which I probably didn't say, was omitted after the word "longitudinally". Is your answer still the same with my amendment?

THE WITNESS: Yes.

Q Now speaking to the reporter at the time, who was here just before the recess, at the time he left, I had asked him about one answer in which you had said -- and I think

you were holding the patents in front of you -- "I had not seen them before," and it wasn't clear whether you were referring to the patents or the machine. Do you remember anything about that answer.

A Yes, I said that as a group of patents was handed to me, and I referred specifically to the patents handed to me, because previously I had only seen the one patent.

Q You were referring to the patents --

A That's correct.

Q (Continuing)-- When you -- Period.

Would you pick up Exhibit 29, Patent No. 3,409,148, and look at figure 6A? Does that show a longitudinally moveable plate for periodically pushing a top portion of the stack of said blanks from the accumulating device?

A Yes, it does.

MR. WYATT: Same objection, your Honor. He knows it is improper.

MR. FABER: I wish I could read that thing out of the corner of my eye, and then he may not object.

Q It is the pusher plate mounted to a limited vertical movement relative to the means for supporting the pusher plate?

A Yes.

Q Now, I want you to pick up Exhibit 28, Patent

Number 3,063,577 and look at figure two.

A Figure number?

Q Two, that's on the second sheet at the top. That shows the spiral lifting device, is that right?

A That's correct.

Q What is the function of that spiral lifting device?

A The spiral lifting device's prime function is to lift the bottom sheet of the bottom box which is in the pile, in the accumulated pile, vertically, a short distance so that the next box will not have to ram into it -- and have its ink scuffed under high pressure, or when warped, that it will have a better chance of clearing in at the bottom of the machine.

MR. WYATT: Your Honor, I object to that, because what the purpose of that figure two is, is fully described in that patent.

THE COURT: All right.

MR. FABER: I thought the -- well, you said "All right." Excuse me.

Q Now, are the glue flaps of the blanks in the stack when the spiral lifting device is used,,still in contact with theblanks above?

A Yes.

Q And when that spiral lifting device is used, the blanks above will nevertheless still serve to hold the glue flap down on the blank below?

A Yes.

Q And is the spiral lifting device used in combination with the stop plate, the slapper plate, the underfeed and the top pushoff?

A Yes.

Q Can a machine that is sold with the spiral lifting device be adapted by the user as required to remove the spiral lifting device for certain purposes?

A Yes, not only can it be, but it often must be.

Q And when must it be? Is there --

A You have a sample there, which explains it, and there are other reasons as well.

MR. FABER: I ask that a carton having the legend "Bear Brand" be marked for identification as Defendant's Exhibit O.

THE CLERK: Carton marked Defendant's Exhibit O for identification.

Q Now, you started to explain when it must be and looked meaningfully at this carton, and I have so marked it.

Will you now complete your explanation?

A Yes.

The glue joint is on top, as is normal, as the box is folded. If the material is not present, as in this partially die cut box, going through the folded gluer, then the lifting would take place only in the corner where there is material, and it would throw the machine off.

THE COURT: It would tilt it.

THE WITNESS: It would tilt, exactly, sir.

THE COURT: I know that.

MR. FABER: I ask that Exhibit O be received in evidence, in order to make it possible fully to understand the explanation given.

THE COURT: What?

MR. WYATT: No objection, your Honor.

THE COURT: All right.

THE CLERK: Plaintiff's Exhibit O previously marked for identification, marked in evidence.

MR. FABER: Your Honor, I was going to start eliciting an explanation of these tie-in sales, so -called. As alleged, they are not in the complaint by the plaintiff.

THE COURT: I am not concerned with tie-in sales.

MR. FABER: I simply want to point out we've got a little five hundred employee company, and

Koppers as competitor No. 1, and Weyerhauser as competitor number two, and that's it.

MR. WYATT: Your Honor, it's four o'clock on Friday afternoon, and we have a witness here on the stand.

THE COURT: I am not concerned with competitive sales. You don't even have to go into it. I tell you right now I am not concerned with it.

MR. FABER: I am doing something that no attorney should do, I am asking questions that I don't know the answers to.

THE COURT: That is bad.

Q How many PH D's are there in the corrugating business that you know about?

A Among the machine builders, I don't know of another.

Q Another than whom?

A Another than Albert Shields.

MR. FABER: One thirty second recess?

THE COURT: Yes, I am going to --

MR. FABER: Thirty seconds.

That's all, your Honor.

THE COURT: Thank you.

We are going to adjourn to -- I suggest you come in at eleven o'clock Monday morning, not ten

o'clock.

MR. WYATT: On Tuesday, your Honor?

THE COURT: Tuesday morning, eleven o'clock, so I can get set up on what I am doing.

All right.

MR. WYATT: Thank you, your Honor.

(Case adjourned until Tuesday morning, February 13, 1973 at 11 o'clock A.M.)

. . . .

INDEX

WITNESS	DIRECT	CROSS	REDIRECT	RECROSS
EDGAR B. LEHMAN		450		

EXHIBITS

PLAINTIFF		IDEN.	EVID.
27	LETTER OF NOV 19, 1971.	422	441
28	PATENT 3063577	433	441
29	PATENT 3409148	433	441
30	PATENT 2963177		440
31	PATENT 3203561		440
32	PATENT 2931520		441
33	PATENT 3601265		442
DEFENDANT			
O	CARTON	454	

TRANSCRIPT OF PROCEEDINGS FEBRUARY 13, 1973

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

----------x

KOPPERS COMPANY, INC., and UNIVERSAL CORRUGATED BOX MACHINERY CORPORATION,

Plaintiffs,

- against -

70 C 926

S&S CORRUGATED PAPER MACHINERY CO., INC.,

Defendant.

----------x

United States Courthouse
Brooklyn, New York

February 13, 1973
10:00 o'clock a.m.

B e f o r e :

HONORABLE MARK J. COSTANTINO,

U. S. D. J.

* * * *

WINFRED LEWIS
OFFICIAL COURT REPORTER

APPEARANCES:

WYATT, GERBER & SHOUP, ESQS.,
Attorneys for Plaintiffs
230 Park Avenue
New York, New York

BY: DOUGLAS WYATT, ESQ.,
ALBERT C. JOHNSTON, ESQ.,
-and-
BOYCE DENT, ESQ.
Of Counsel.

OSTROLENK, FABER, GERB & SOFFEN, ESQS.,
Attorneys for Defendant
10 East 40th Street
New York, New York 10016

BY: SIDNEY G. FABER, ESQ.,
- and -
JEROME M. BERLINER, ESQ.,
Of Counsel.

* * * *

MR. BERLINER: I offer in evidence as Exhibit P, the deposition of Theodore Ley.

MR. WYATT: Your Honor, we have no objection other than the burden on the Court. We suggest he point out what it is in there that is pertinent. I mean, that's just a long deposition.

THE COURT: You don't want the Court to read the entire testimony?

MR. BERLINER: No, but for purposes of our brief, we will make reference to it. If you want us to take out portions of it now, we think it will be an unnecessary burden on the Court's time.

THE COURT: All right.

MR. BERLINER: I offer in evidence as Exhibit P-A, a photograph which corresponds to Defendant's Exhibit 3 for identification, noted in the Ley deposition.

MR. WYATT: No objection, your Honor.

(So marked.)

MR. BERLINER: I offer in evidence as Exhibit P-B, a photograph corresponding to Defendant's Exhibit 12 for identification referred to in the Ley deposition.

MR. WYATT: No objection.

(So marked.)

MR. BERLINER: I offer as Exhibit P-C a photograph corresponding to Defendant's Exhibit 13 for identification noted in the Ley deposition.

MR. WYATT: No objection.

(So marked.)

MR. BERLINER: I offer in evidence as Defendant's Exhibit P-D, a photograph corresponding to Defendant's Exhibit 14 for identification noted in the Ley deposition.

MR. WYATT: No objection.

(So marked.)

MR. BERLINER: I offer in evidence as Exhibit P-E, a photograph corresponding to Defendant's Exhibit 15 for identification noted in the Ley deposition.

(So marked.)

MR. BERLINER: I offer in evidence as Exhibit Q the deposition of John Lopez.

MR. WYATT: No objection with the same suggestion.

(So marked.)

MR. BERLINER: I offer in evidence as Exhibit R, the deposition of Albert F. Shields.

MR. WYATT: No objection, your Honor.

(So marked.)

MR. BERLINER: Mr. Cantor, would you please take the stand?

B E R N A R D J. C A N T O R , called as a witness, having been first duly sworn by the Clerk of the Court, testified as follows:

DIRECT EXAMINATION

BY MR, BERLINER:

Q Mr. Cantor, where do you live?

A I live in Detroit, 3200 Penobscot Building,Detroit, Michigan is my office.

Q What is your present position?

A I am a patent attorney.

Q What is your educational background? Coming forward from your high school days?

A I graduated from Brooklyn Technical High School, attended after short service in the Army, for a couple of years, Cornell University, received a Bachelor of Mechanical Engineering in 1949. Then I received a juris Doctor Degree from George Washington University in Washington D.C.

Q Have you had any other formal schooling ?

A Odd courses here and there, various subjects.

Q What subjects?

A Some engineering -- mostly I taught rather than taking the courses.

Q What was the nature of your teaching subjects?

A I taught as an assistant in the machine design department in Cornell University. The subjects were machine design and also worked on some project development which I talked about. Then I taught engineering at the University of Detroit for three years, 1952 through 1955 or '56. Then I taught at Wayne State University for about ten years on the subject of patent law.

Q Coming forward from your college days, what has been your work experience?

A Toward the end of my college days, I worked as an engineer for the Naval Ordnance Laboratory in Indian Head, Maryland, doing developmental equipment work on the subject of new high explosives, developing machinery to test explosives.

Then I worked for the United States Patent Office as a Patent Examiner from 1949through 1952. During that time, under the then existing Patent Office Training Program, I attended law school at night, took courses in the Patent Office during the day time and also worked as an Examiner.

In 1952, I was hired by Kelsey-Hayes Wheel Company in Detroit, Michigan. They manufacture brakes, automotive suspensions, wheels, various automotive accessories, and also some miscellaneous transfer equipment.

I worked for them for a short time and then in about

1953 I went into private practice of patent law and I have been a partner in a patent law firm in Detroit up until the current time.

Q As a patent examiner, what arts did you work in?

A I worked on several different subject matters or arts, as you call them. One was sheet folding, manifolding of papers, equipment involved in handling things, in printing presses. I also worked on what's called article carriers, a collection of all sorts of things for carrying other things and also partitions or closures, it's various things that close other things, and that may be either manually operated or machine operated.

During the years that I have been in the patent practice I have worked on quite a variety of subject matters, and being in Detroit, where the automotive industry is located, we represent a number of suppliers, and I have had quite a bit of work in various types of mechanical transfer mechanisms, handling equipment, conveyors, and so forth.

Q Have you prepared patent applications?

A Yes, I have prepared a very substantial number of them over the years, somewhere in the order, I suppose, of maybe 1,500, 2,000, over a thousand, I suppose, anyhow.

Q Since becoming a patent attorney have you been to the Patent Office to conduct business?

A Yes. After leaving the Patent Office for a number of years, I used to conduct meetings in Washington with examiners for other attorneys who worked in Detroit, a source of revenue for me, and I used to go down to Detroit about eight or ten times a year and conduct about, oh, fifteen to twenty conferences with different examiners at each one of these meetings. I did that from about 1952 or '53 up to perhaps two, three years ago.

Q When you said you went down to Detroit, did you really mean you went to Washington?

A I went to Washington. I am sorry.

Q What preparation have you made for your appearance as a witness in this action?

A Starting about 1971, I believe, early 1971, somewhere in that time, I first started the patent in suit, the file wrapper, which is the Patent Office file on the subject matter, various old patents which are called prior art, which have been called to the attention of the man who filed the application, and also to the attention of the defendant in this case.

I visited the Time Container Corporation in Monroe, Michigan, where they have an installation of one of the accused machines. Then I visited -- spent some time at Weyerhauser located in Warren, Michigan, where I observed

S&S Machinery. Then I went to Belmar, New Jersey. The company is called Western Craft East, where I visited and saw one of the accused machines here, the one that has the mechanical lifter that corresponds to -- I can't see the exhibit number here, the chart on the floor.

Chart 12A.

And at the same time I also studied the earlier Universal machine that has been discussed in this case, the one that has the right angle.

Then I visited Kellogg's Cornflake plant in Battle Creek, Michigan, and spent some time studying the automatic equipment for utilizing boxes and for packaging the breakfast cereal boxes into cartons, the automatic transfer equipment.

Then I went to S&S in Brooklyn, New York, spent some time in the plant there studying their machinery and their construction.

More recently, in December of this past year, I visited Henckens Container in Union, New Jersey. I believe that's the same place the Court went to, and I have subsequently visited S&S again, the plant.

In addition, I prepared for my own use, and as it turned out I have put it together in a form to illustrate my testimony, a series of diagrams or charts or graphic assembly of the various things that I have reviewed which I

think would be pertinent to my testimony. I think the Court has a copy of that.

Q Now, referring to the patent-in-suit, Exhibit 1, and the blow-up of drawing figure 1 of that patent, what are the salient features of the invention in the Shields patent-in-suit?

A In answering that question I have in front of me the material that I prepared that illustrates what I am going to say. I much prefer referring instead to -- let's take Chart No. 3.

Q Please proceed.

A In answer to your question, first I would like to explain the function of this machine and what it does and the salient features which will fit right into the function, they go together, function and structure.

At the outset, the function of this device is to continuously receive box blanks without interruption, to accumulate or stack these box blanks into a pile, to straighten out the crooked or misaligned or untrue box blanks which are received, to hold these box blanks as they are being trued or straightened, and ultimately to deliver a bundle or pile of blanks off the top of the stack in such a way as not to interfere with the continuous operation.

Now, the salient features, or what I choose to call

mechanical elements that go along with that is, first of all -- there is a conveyor which receives the box blanks from the preceding machine which we all saw was the folding machine.

The box blanks are received upon the conveyor of the stacking device and upon receipt they go underneath the stack of blanks that are already on the stacker. At that point there is a slapping plate whose function is to reciprocate back and forth, to move back and forth and to hit that blank that came in.

Now, the purpose of hitting the blank is that the blank that has come in has been glued, folded, but the glue is not yet set. The glue is wet so the parts are movable.

Since we are dealing with the cardboard, corrugated board, the blank itself may be perfectly folded or it may be imperfectly folded. Many of them are not perfectly folded. As the Court heard, the board itself becomes warped, it becomes bent.

As to the box blanks that are not true, that are not folded properly, they are slapped by the slapper plate and the trick is this: As the slapper plate hits the blank it shoves the folds into alignment. Now, the blank itself being made of cardboard is springy or resilient, and if the blank itself were hit all by itself, it would have a general tendency to spring back out of alignment. It would be hit

into alignment, spring right back again.

Now, it may not spring all the way back, but you can see that with the springiness of the cardboard, the slapping itself is only part of the operation because each slap shoves the folds into alignment and the next part is the stack itself. In this case the stack acts like a part of the machinery. It actually is a machine element in the context of this machine, and that is the stack is weighted upon the top of the blank which is being hit and the next box that comes underneath applies friction to the bottom of the blank that's being slapped, so that each blank, as it is being slapped, is held from the bottom, squashed down from the top, to some extent -- there is a limit to pressure, of course -- and each time it's hit, the folds align and they stay aligned because of the gripping or clamping action of the stack itself.

(continued next page)

RP

A (Continuing) Now at that point the slapping is repeated, the next blank comes in. Ultimately the -- the stack rises, the blank goes up and up and up into the stack.

During that time the glue occurs, it sets, and the blank is now held tight and alligned due to the co-action between the slapper and the stack. The two act together as if they are a machine. One acts as a tool for compacting. The other acts as a clamp.

When the stack rises -- that is there are now quite a number of box blanks in the stack -- the next element that comes into play is the pusher element, which comes along the top of the stacker and pushes off the blanks that are in its package, pushes it -- displaces it off the stack or pushes it from -- in the direction of what they call longitudinal direction, the forward movement of the machine.

The pusher itself is described as being mounted for limited vertical movement. Mounting for limited vertical movement means that the pusher has the ability to go up and get out of the way so as not to interfere with the stack operation.

As I think has been pointed out, but I can amplify it, when that pusher moves if a blank comes underneath the

stack that blank causes the stack to rise and the pusher bearing down on the cardboard will dig in or scrape or rub on the -- on the printing on the blank. So the pusher has to have the abilitity to get up out of the way.

In addition, after the pusher operates and does its job of pushing, it has to be able to retract in such a way as not to drag back the boxes that it just took off or to drag back what is left on top. It has to have the ability to get out of the way, to rise. So limited -- the pusher plate itself, the pusher device is mounted for limited vertical movement to the extent necessary.

These are the salient elements of the device.

Q Are these salient elements expressed in Claim One of Exhibit 1?

A Yes, they are. I can answer that better, I think, if I can refer right to Chart No. 4, where I have reproduced Claim One.

Incidentally, I -- I might say this to avoid any confusion: I personally made all these charts and I did them by cutting and pasting with scissors and a paste pot. Chart No. 1, which I made, that is 9 Chart at the very front, it explains the whole operation,

that I made by laying out on a piece of paper with instruments and I made the drawings. I printed all the printing and my secretary did all the typing for me.

Now, that was all pasted up on boards and then it was photocopied.

THE COURT: Photocopied, all right.

THE WITNESS: In reproducing Claim One, I found it more convenient to cut the claim up into its constituent mechanical elements, and I did this with a -- with a scissors, cut it right out of the patent copy, pasted it on a piece of paper and I drew lines around the different elements, and then to make it easier to follow, I numbered each one of the elements and I color-coded them with a crayon pencil. So that there is something to grab hold of in talking about these elements.

Referring to Claim One, which is the one in this lawsuit, the constituent elements described in the claim are as follows:

First -- I don't think I have to read them all. I think they are all expressed here but I can paraphrase them:

First of all, there is a reference at

the beginning of the claim as to what this thing is all about: It is a device for straightening which is the point I mentioned before, for stacking and for delivery, and it is to be used with another machine. It doesn't exist by itself. It is part of an -- of an operation.

Now, the first mechanical element, which I have numbered "1" -- and I have used a yellow code for this, which I have repeated through all the charts, the code is consistent -- is the conveyor itself.

The claim describes a conveyor operable in synchronism with said machine.

BY MR. BERLINER:

Q Let me interrupt you.

What does synchronism mean?

A Synchronism means -- I think it is a common English word -- it means to operate together or to work at the same time or to be coordinated with; in effect, the claim is saying that there is a machine which is delivering the folded blanks, which we saw at the Hencken's plant, and now we come to the machine of the patent in suit, which works with it. It is coordinated with it.

It operates at the same time.

And I -- after listening to the testimony last week, I went to the dictonary to make sure I was -- I was correct, because I had always assumed synchronism meant operating at the same time. And that is what the dictionary said, in sychronism . is working at the same time.

Now, this conveyor is to work at the same time as the preceding machine, which is the folder that we saw.

Q Please continue.

A The second -- the second mechanical element is the over-all statement that this is a stacking device, which is to intercept and accelerate the blanks to form a stack. And it also states that the blanks are fed in from below. It is a stack which is fed from the bottom, not from the top.

I think you can understand that if you feed from the top you miss the whole point of using the stack sas a clamping mechanism. If you feed from the top that blank comes in -- in fact I think I saw this at the -- at the plant in Bellmore, the Western Craft plant, where they had this earlier Universal machine, the right angle machine.

The blank comes in at the top and falls on the stack. Now, when that blank falls down with the wet glue, if the blank is flat and true, there is no problem. But if the blank is made of warped board or has a tendency because of misalignment or misfolding to spring open, then the -- it pops open or pops part way open and forms a sloping surface at the top of the stack.

The next blank comes in and slides down that surface. The third blank comes in and stands up and jams the whole mechanism.

So it is significant that this is loaded from the bottom, not from the top. Loading from the bottom means that the stack grabs, holds and waits down the blank. Loading from the top means that sooner or later, you are going to have problems because there is nothing holding down the flap from popping open where the -- where the board is of the type that would induce that.

All right. Now the third element mentioned here, which I have color-coded blue -- incidentally, the stacking device I have color-coded purple, No. 2 -- the third element are the pair of plates, the two-- two bound area lines of the stack.

Q Front and back bound areas?

A Front and back, forward and rear, or trailing edge, which is the rear and forward, which is the front.

I have color-coded the plates blue, and if you look at the diagram of Fig. 1 of the patent, which I have reproduced here, you can see the blue plate on the right-hand side, Blue Plate 57, which I have colored blue.

I did not color the other plate blue, although I indicate the blue letter 3 -- the blue number 3.

Now, the other plate, the one on the left-hand side, the plate No. 20, I have color-coded green because that represent the mechanical element of the slapper plate.

Now, the slapper plate here is reciprocally operable, meaning that it periodically goes back and forth. And each time it goes forth, it hits the blank that needs hitting for straightening. It is a straightening plate. In fact, I think in the -- in one of the exhibits here, one of the plaintiffs' drawings, Exhibit 5, it was referred to as a squaring plate. And I know in their -- in the literature that I saw of the plaintiff, I saw the word "squaring plate."

Yes, if I may, your Honor. I can see where -- Exhibit 3-A -- the plaintiff in its own drawing refers to this as a squaring plate, and that is exactly what

it is. The purpose is to square the box blank, to align or true or square it.

Now, that plate reciprocates back and forth. When it hits the box, it squares. When it releases it goes back for another, catching its breath, and it lunges forward again.

Q Does that plate also oscillate back and forth?

A It oscillates, it reciprocates. Oscillation and reciprocation in the mechanical engineering context are exactly the same thing.

If you look it up in the dictionary, which I did this weekend by the way, I looked in about 10 dictionaries to make sure I got it right. You will find they are exactly the same thing.

THE COURT: Do they have those words in the patent, oscillate?

THE WITNESS: They used them in the alternative.

THE COURT: They had oscillate and said, "Change to reciprocate," is that right?

MR. WYATT: Yes, your Honor. A patentee is his own lexicographer, and the word recipriate in the patent has a very special meaning and

that is the particular movement, back and forth, of their plate.

THE COURT: I was just sure we weren't talking dictionary terms but reciprocation and oscillation -- of course, a dictionary talks one thing but we are talking about the specialized engineering field plus the patent field itself.

Do you use the reciprocating and oscillating in the engineering field?

THE WITNESS: Yes, sir, I do. If it moves back and forth, the words are interchangeable.

THE COURT: No, but it doesn't have to move back and forth obviously, does it? It can go up and down, quiver?

THE WITNESS: Go up and down, yes.

THE COURT: Without moving at all, just quiver. Like a light bulb, that oscillates, doesn't it?

THE WITNESS: Correct.

THE COURT: All right, go ahead.

BY MR. BERLINER:

Q Continue, please.

A Now, it says here in the claim that the -- the plate itself is reciprocally movable in a longitudinal direction to apply a straightening force to the blanks.

In other words, it tells what its function is, its function is to apply that straightening force or squaring force.

Now, the next mechanical element is that there is an opening below that slapping or squaring plate and that opening is simply a place where the box blank can come into the stack.

The next -- and I have colored that dark green. I have given it the number 5.

Now, we get into the elements that are at the top of the stack. I have colored orange and numbered 6, a pusher plate which is located above the stack itself and is described as a longitudinally movable plate for periodical pushing, and so forth.

THE COURT: That is the bicycle chain, although you don't show the bicycle chains in this?

THE WITNESS: Yes, sir, in making up this diagram, I cut off the bicycle chains. They are reproduced on one of the earlier

diagrams.

Q Let me interrupt you, Mr. Cantor.

What does periodical pushing mean in this context?

A It means not working continuously, not pushing all the time, but pushing and the not pushing and then pushing and not pushing.

Q Please continue.

A The next element is No. 7, which I have colored pink, and that is a means or -- or some element for holding the pusher plate so that it is upright or substantially vertical during the time that it is pushing.

The next element, which I have colored dark blue, is colored dark blue, No. 8, states that the pusher plate is mounted for limited vertical movement.

The last element -- and I am omitting some of the words in describing this --

THE COURT: Yes, I know.

THE WITNESS: (Continuing) -- the last element, which I have colored brown, are that the blanks are fed into the stack while the pusher plate is operating so that the -- I think in context it means that the stack is operating

to receive blanks without interruption by the operation of the pusher plate.

The pusher plate does not interfere with or impede or in any way change the operation of the stack.

I might mention this for reference of the Court:

What I did was this for convenience: On Chart No. 2 --

THE COURT: Yes, I saw that, those lines.

THE WITNESS: (Continuing) -- I pasted up the entire specification of the patent on the left side, and I colored them in a way that Highlights the parts.

THE COURT: I see.

THE WITNESS: So that they can be easily spotted. I also explain on that patent the function, which I explained on the top of that chart, and the summary of the operation, which I gave on the bottom, which in essence is what I have been talking about now.

THE COURT: Now, we are going to take a five-minute - 10-minute recess. We will

take the students in to see something and then we will be out again. We're doing okay.

All right. The Court will recess.

(Recess taken.)

THE COURT: O.K. Can we get down, you know, to the facts in the case or what we are disputing.

MR. BERLINER: Yes, your Honor.

THE COURT: I think I've got the nomenclature. I see this thing when I'm sleeping. All right.

DIRECT EXAMINATION

BY MR. BERLINER (Continuing):

Q Mr. Cantor, just prior to the recess you had testified as to salient features of the Shields' invention. Do you find these salient features of the Shields invention in the accused device of Exhigit 5?

THE COURT: Do you want to step down?

THE WITNESS: No, I can see it.

Yes, I do.

Q Please explain.

A Rather than using Exhibit 5 I prefer using my own work chart, Exhibit -- Chart No. 6.

In Chart No. 6 I have reproduced the drawing which is shown on Exhibit 5. It's the same drawing, as far as I know, only it's reduced scale. And that's been identified on the chart as the accused mechanism.

That device, the accused mechanism, is functionally

and structurally the same as the patented device.

First as to the function. It does the same job in that, as shown in the sketches I made -- below this, by the way, I took -- I took reproductions of the upper drawing, and by cutting and pasting I positioned the pusher in three different locations in the lower part of the chart. I did that simply by pasting it in the right spot, photocopying it.

Functionally, the accused mechanism receives a blank from the preceding mechanism, the folding device. It is synchronized with the preceding mechanism in the sense that it works with it, works simultaneously.

It has a slapper or straightening plate which strikes repeatedly the wet glue, not yet dried glue blank which has come into the bottom of the stack.

The stack grabs and holds and grips the blank which has come in and which is being slapped, to act as a clamp or holding device. The blanks rise in the stack. There is a pusher mechanism which removes periodically the top portion of the stack.

In this particular case the pusher mechanism, depending on the size of the blank -- the pusher mechanism doesn't shove the blank all the way off and on to the next room, it simply displaces it a distance, and then another pull

roll working with the pusher mechanism actually completes the removal.

Functionally the two devices are identical. They are designed to do the same job, as I see it. And the machines which I did see, the three machines which I saw in Monroe, Michigan, in Bellmar, New Jersey and in Union, New Jersey, in my judgment of what I saw were functionally the same as what is shown in the patent.

Now, as far as the patent itself, the claim of the patent is concerned, on Chart No. 6, referring to the mechanical elements -- and I won't try to read them again; these are the ones I described a few minutes ago-- and the claim is re-reproduced on Chart 6, it's the same picture I talked about before.

As you can see, element No. 1, the conveyer, is in the drawing of the accused mechanism. The stacking mechanism --

Q In that drawing --

A Sir?

Q (Continuing) -- is that the left yellow belt?

A Yes, it's the left yellow belt. Actually, I labeled -- I mislabeled this, it's not correct. I labeled both the left and the right belt as No. 1 conveyor, and that's not correct. The left one is the one that should have been labeled. I

found that mistake too late to correct it.

Q Continue please.

A The stacking device -- this is a stacking device, as you can see by the purple No. 2, which I put on the drawing with the circle, the key number. The pair of plates are in the accused mechanism and I have circled them with the number 3 colored blue. You can see the blue key number on the drawing.

The slapping plate or squaring plate, which is colored green, identified by the No. 4 in the green circle, is also there.

The opening below the slapping plate, which is identified by the No. 5, dark green, is found in the accused mechanism.

The pusher is colored orange. It's identified by the No. 6 colored orange. You can see that on the drawing of the accused mechanism.

The pink colored No. 7, which is the means for supporting the pusher vertically during the push, is broadly designated -- that means consists of several different parts, and it's all identified by the No. 7 on the drawing.

The pusher plate mounted for limited vertical movement, that pusher plate is mounted for limited vertical movement. Tha't No. 8, colored dark blue.

I might mention, by the way, when I saw the machinery both in Monroe, in Bellmar and also in Union, I checked the pusher plates when the machine was not operating, and I could lift with my fingers the pusher plate, I could lift it up vertically. It was certainly mounted for vertical movement. In fact I did move it vertically in each case.

The last part, the brown said stack being fed with blanks as the movable plate is removing said top portion from the stack, that is identified on the drawing as brown colored No. 9, and that is something that I observed. I saw that take place in the operation in Monroe, Michigan at Time Container. I saw the blanks going in during the push, I saw the blanks going in during the retraction of the push. And it was observed also at the plant in Union, New Jersey by me.

So I find -- I find that the mechanical elements which are described in claim No. 1 are all found in the accused mechanism, and I have illustrated my finding on this chart No. 6.

Q How did the mechanical elements of the accused device of Exhibit 5 co-act with one another?

A They co-act in the same identical way that the elements of the Shields patent do. They -- perhaps I can describe that faster without getting into too many words. Will you

turn to Chart No. 8.

Chart No. 8 was my own summary of the operation of the function of the accused device, the one which I just testified about, of the drawing exhibit 5 as compared with the patent. And on this chart I put my conclusions down.

Both devices, that found on the picture -- the drawing of Exhibit 5 and the device of the Shields patent, function the same. They both continuously accumate and they stack. They both are compact and not spread out like the prior right-angle machine was. They both straighten out the inaccurately folded blanks. They both utilize the stack itself as a part of the mechanism to hold the blanks as the blanks are being slapped, as the glue is setting, as the blanks are being straightened.

They both periodically deliver piles or bundles of numbers of -- of straightened box blanks off the other end of the stack.

And they all do this very rapidly, and they all do this in a way that does not interfere with the feed of the blanks into the bottom of the stack.

Both machines are identical in that sense.

Now, as I have illustrated here on Chart No. 8, in which I have shown three corresponding locations of the pusher mechanism, the upper drawing on the left side, which

shows the Shields patent machine, shows the pusher getting ready to push in a -- or in a non-pushing position. On the upper right-hand side the accused Universal machine, which I have identified, by the way, as Defendants' Exhibit 9, which is the number I understood was originally applied to this drawing Exhibit 5, again the upper right-hand drawing shows the pusher plate not yet pushing on the accused machine.

The two central drawings left and right show the Shields machine during the act of pushing on the left side, the Universal machine in the act of pushing on the right side.

In the lower two drawings on the left side the drawing of the retraction or the return of the pusher plate on the Shields device, and on the right side the return or retraction of the pusher device of the Universal.

I might mention that the actual mechanical mechanism for holding the pusher plate are different in both devices. However functionally they are the same, and in terms of the claim of the patent they are identical.

Now, I made one more comparison, and I might allude to it just one moment and avoid some testimony on it. In Chart No. 9, the very last chart in the book, I compared the Shields with the Universal machine with respect to the claim

in suit. And as you can see by the color coding of the numbers, which represent each of the mechanical elements set forth in the claim, I have found in both the Shields patent machine, the drawing from the patent, and also in the accused Universal machine, which is called here deposition Exhibit 9, and which is called in the courtroom Exhibit 5, all of the mechanical elements which are described in the claim. And I've designated that by using color-coded numbers which correspond to each of the mechanical elements described in the claim.

Q Mr. Cantor, in the accused device of Exhibit 5 will you please explain to the Court what establishes the lower position for the pusher plate, and to assist you I hand you Exhibits PB and PD.

A These two exhibits are photographs of the machinery which would correspond to the machine of Exhibit 5. May I do this? I can explain it with my fingers faster than I can with talking. Can I take a piece of paper? I can make a fast sketch and show you exactly how they operate.

May I step down, your Honor?

THE COURT: Yes.

THE WITNESS: In -- in the actual machinery, if I can draw a schematic diagram, there is a cylinder -- and I am doing this schematically --

there is a cylinder which operates a rod --

THE COURT: Excuse me a minute.

THE WITNESS: In the actual machinery there is a cylinder, a rod, which moves in and out of the cylinder, and at the end is the plate. The cylinder is pivoted -- actually it's pivoted below the end in actual, real life, but I've shown the pivot at the end of the cylinder, so the cylinder can pivot up and down.

So the cylinder has on it trunnions -- that's t-r-u-n-i-o-n-s -- or studs, like on the old-fashioned cannons, they had two things that stuck out of the side of the cannon for mounting on the carriage. And it looks roughly like this, if I can take artistic license.

Now I have drawn in blue, I guess, the trunnions or studs. Now, there is a plate on each opposite side of the cylinder -- I'll draw that schematically, like so, on one side. That plate has in it a slot, and a stud or trunnion fits through that slot.

Now, as the Court can see, when the plate is in the upright position the stud or trunnion rests on the bottom of the edge which defines the

slot. Now, if the cylinder is swung up that trunion or stud now moves up within the slot. Now, what makes it go up and down -- first of all, in -- in the case that I saw I made it go up and down, I put my finger underneath the plate and I moved it up and down.

In the machine itself there is that secondary cylinder which has been talked about, a cylinder that in effect pushes the bottom of the first cylinder, raises it and lowers it -- actually it doesn't push the bottom at all, actually it's connected to the same trunion, it lifts the horizontal cylinder up and down.

MR. FABER: I ask that the sketch that the witness just made be marked as Exhibit S in evidence.

MR. WYATT: No objection.

THE CLERK: Marked in evidence.

(So marked.)

(Continued next page.)

HS/td/3/1

Q Mr. Cantor, earlier today, the issue concerning the relationship between the expression oscillator-reciprocate has been brought up. So that it will be of help to the Court, I suggest that you come up and sketch -- make a sketch concerning the testimony you have given before about the relationship between the terms oscillate and reciprocate.

A I do not have to make a sketch. In the context of this kind of machinery it means going back and forth -- both meaning going back and forth. I would like to mention this:

I found -- I suppose this is puzzling. I went through the Patent Office's file to try and figure how it came about that the Examiner chose the word "Reciprocate" instead of oscillate. I did not find any basis for requiring one word or the other. There is no prior art or literature or publication as to that. The prior art suggests that reciprocate is a trade term. For example, the Speiss patent testified to in this case -- that is Patent No. 263751 tab 16 of the prior art Exhibit Book. That patent talks about reciprocating plate, and in fact, the plate is pivotally mounted, in the words of the art here. The word "reciprocate" means go back and forth, whether the plate is mounted one way or another way. It happens in looking through this Patent Office file as to why the Patent Officer chose one word, there are Examiners who are in a sense, biased, or nutty towards one word or

another --

MR. WYATT: I object to any criticism as to their being biased or --

THE WITNESS: There are men there who choose one word over another. It's an accident of people's preference. I do not see in this case, any reason why the word "oscillate" should be used in preference to "reciprocate."

In context, they mean the same thing.

MR. WYATT: I object to this line of questioning. The record speaks for itself. The Patent Office Examiner stated that the word reciprocate doesn't describe the back and forth movement of the plate. That's the end of it. Regardless of what Mr. Cantor says, he cannot change what happened in the Patent Office.

THE COURT: All right.

Q Mr. Cantor, turning your attention now to the accused device, Exhibit 3. Do you find the salient features of the Field invention in the accused device of Exhibit 3?

A Yes, I do.

Q Would you please explain that?

A May I explain it with reference to chart No. 5?

THE COURT: We have been all through that now.

We have been through the salient features, the color charts and so on. It cannot be changed. It is the same chart. I know what he is talking about.

MR. FABER: Your Honor, we have referred to the infringement Exhibit. We are going back to 3; they are different machines.

THE WITNESS: Perhaps I can sum it up quickly.

THE COURT: I thought we were through with 5.

MR. FABER: Now, we are up to three.

THE COURT: All right.

MR. FABER: We took it out of numerical order.

THE COURT: Chart three.

THE WITNESS: Five.

Q In your testimony about Exhibit 3, please do not repeat anything unnecessarily.

THE WITNESS: I will sum it up rapidly.

THE COURT: Five is the same thing. It is the same piece of paper, chart five and Exhibit 3.

MR. FABER: No, your Honor.

It is a different structure.

THE COURT: You did not talk about Chart 5 at all?

THE WITNESS: No, sir.

THE COURT: Then, I am wrong.

THE WITNESS: Chart 5, what is now called Exhibit 3, and which was referred to in this court before as Universal Prototype Machine, without going through all the mechanical elements, I could summarize it by saying in chart five I have illustrated my findings and my conclusions and my opinion that all of the mechanical elements described in claim one, are found in the accused mechanism which is now identified as drawing Exhibit 3.

Q What are the differences between the accused devices of Exhibit 3 and 5?

A In Exhibit 3, the prototype machine, the mounting of the pusher plate for vertical movement was accomplished in a slightly different way. The pusher plate in Exhibit 3 -- two pusher plates, and one part slides up and down relative to the other. That's Exhibit 3, and that's corresponding to chart five.

Exhibit five which corresponds to my chart number six is in essence the same as that sketch I just drew in which the mounting for vertical movement of the pusher plate is accomplished in a slightly different way, namely the pusher plate in that case is secured to a pivotal mounted cylinder which in turn has the studs or trunnions fitted into the slots on the plates and that device is moveable by means

of the second piston cylinder underneath it. Other than that, the two machines appear to me to be identical.

Q Mr. Cantor, would you please turn your attention to Exhibit 12. Do you find that the salient features of the Shields invention are found in the accused device of Exhibit 12?

A Yes, I do, but I will have to amplify it. Exhibit 12 is a drawing only of the mechanism for mounting the plate. I did see a machine made like this -- the one in Belmar, New Jersey. In that machine, what is relevant to this case, the mechanism,aside from this one part, was all the same as the mechanism as shown in Exhibit 3 and 5 in this case. It's the same machine. The difference is the device used for permitting-- for mounting the pusher plate or vertical movement.

Now, in this device as in the prior devices, the pusher plate is mounted for vertical movement, and I can show, -- it might be easier to show how it operates first. I can show it on chart number 7 to see the movement of the pusher plate. It moves out and then up, and around, down again.

Now,so the pusher plate functions in this machine in the same way as the two prior pusher plates functioned. It does the same job in essentially the same way. This pusher plate on Exhibit 12A has a track upon which the roller travels, the rollers supporting the pusher plate beneath it. As the

roller moves upon the track, there is a fixed long plate above it which guides that roller to move horizontally. The roller moves, I believe, about two inches before it pushes. For the first part of the movement of the roller, it is not yet pushing it is getting ready to push and being lined up to push. It begins pushing somewhere at the point where there is a cross line. At that point the roller keeps going toward the left, but as it goes to the left -- as the Court can see -- the plate above is relieved so there is room for that roller to come up a little way if it has to. As the roller moves along it comes under the moveable ramp and that goes up out of the way.

MR. WYATT: I object, unless he has seen it. It does not do that. It comes up and holds -- unless he can testify he saw it operate, I object to his testimony as to that point.

THE COURT: Have you seen it operate?

THE WITNESS: I have not.

MR. WYATT: The point being, your Honor, this pivot piece is restrained in its upward movement.

THE COURT: Yes, there is a lip on it.

Q Mr. Cantor, how do you come to the conclusion concerning the position of the ramp when it is being raised by the roller?

A I made -- I was curious about that and I made a tracing of the moveable part on a small sized duplicate of this drawing. Then I swung the tracing around until it bottomed out-- until one lip contacted another lip and I found it was above the horizontal -- swung up out of the way.

Q Did it assume a vertical?

A No, it didn't go vertical. It wasn't horizontal either. The roller comes along beneath the swinging ramp. As far as I could determine by actual swing on paper, there was ample room for the roller to come up and down. Then it comes down to the end where it moves -- travels up over the switch and back around again. My conclusion is that roller and that means or mechanism for mounting the pusher plate is certainly of a type which mounts the pusher plate for limited vertical movement so it gets out of the way when the stack rises either on the push stroke or the retraction stroke.

Q When the roller of Exhibit 12 is to the left of the ramp, is there anything restricting upward movement of the roller and the pusher plate attached to it?

A No.

MR. FABER: I offer in evidence, the book of nine charts, which the witness has been referring to throughout his testimony.

MR. WYATT: Your Honor, if this can be accepted into evidence on the basis that his charts went into evidence, that it is Mr. Cantor's brief in preparation of this, I have no objection.

MR. FABER: It is explanatory material to assist the Court in making a determination .

THE CLERK: Chart marked into evidence as Defendant's Exhibit F.

THE COURT: We will take our luncheon recess now. Two o'clock.

(Luncheon recess taken.)

. . . . . .

AFTERNOON SESSION 2:40 P.M.

MR. BERLINER: Your Honor, I would like to read one interrogatory and its answers into the record. It's interrogatory three:

"Identify by model number or otherwise each underfeed stacking device manufactured, leased and/or sold by plaintiff or any company in which plaintiff owns an interest since June 13, 1961."

The answer, which was sworn to on February 19, 1971:

"In answer to interrogatory three, the following information is submitted: Subparagraph A, prototype model -- underfeed stacker device located at Mead Container Corporation, Edison, New Jersey. Only one device of this type was manufactured and sold by Universal. This device has the following Universal designation: M 363 and M 1390.

"Subparagraph B: Production model -- the only type of underfeed stacker device being presently manufactured and sold by Universal. An example of this production model is located at Hankins Machinery Corporation, Union, New Jersey.

"The above-mentioned prototype model and production model were made available for inspection and

photographing by defendant's attorney. All of the underfeed stacker devices manufactured, leased and/or sold by Universal in the United States are of the production model type except for the one sale of the prototype model referred to above. The production model type underfeed stacking device as manufactured and sold by Universal in the United States, are identified as follows: M 1783, M 1513, M 1745, M 1857, M 1655, M 1774, M 192."

MR. WYATT: Your Honor, we'll stipulate they can be read into the record after the Court has left, rather than take the Court's time.

THE COURT: Okay.

MR. BERLINER: There is a closing sentence:

"Three of these devices manufactured in the United States have been shipped to foreign countries."

CONTINUED DIRECT EXAMINATION

BY MR. BERLINER:

Q Mr. Cantor, I hand you three photographs that have been identified as Exhibits U, U-A and U-B. Are you able to identify these photographs?

A Yes.

Q Please tell us what they are?

A These are copies of photographs which I took in Hankins

plant in Union, New Jersey. I took them on December 19, 1972.

Q What do these photographs show?

A The one I have in my hand now, Exhibit U, is a photograph showing the operation of a pusher and alsoshowing that a box blank is moving into the bottom of the stack.

MR. WYATT: Your Honor, I object to this line of testimony. This is all hearsay as to that operation of that pusher. Unless there is testimony as to how that's set up, what air pressure the operator had on the pusher, how many blanks per minute, any of this testimony as to these photographs would be hearsay.

THE COURT: Are you familiar with that machine?

THE WITNESS: Yes, sir, these are pictures I took while I was watching the machine.

THE COURT: While you were watching the machine?

THE WITNESS: Yes.

Q Was the machine producing boxes when this picture was taken?

A Yes. This was not a staged picture. I -- I have a whole collection of pictures. I had a Polaroid and I just kept on clicking pictures.

THE COURT: Which machine is that again?

THE WITNESS: It's the Universal machine in Hankins, the Universal in New Jersey. What I did was

I took Polaroid pictures of the machine while it was working, and I also took some pictures when they shut the machine down.

THE COURT: Your Objection is what?

MR. WYATT: To them being admitted in evidence. Your Honor, I object to them unless they are further supported by testimony to state what conditions the machine was operated under.

However, I have no objection if they are just offered in evidence as photographs.

THE COURT: Of the machine?

MR. WYATT: Of the machine, and we will stipulate they are photographs of our machine at Hankins as your Honor observed.

Q Mr. Cantor --

MR. WYATT: But as to the functioning of it, we don't believe that there has been any testimony as to that, that would support that evidence.

Q Mr. Cantor, how long a period of time did you observe the operation of the machine in Exhibit U?

A Several hours.

Q Did you have any control over the setup or operation of the machine of Exhibit U?

A No, I did not. Well, yes, I did, in one sense: Towards

the end of the day, I asked the operator to change the speeds, which he did. That's all.

But these pictures were not taken at that time. This was taken during the operation that was going on when I came in to see the equipment.

Q What was the machine of Exhibit U producing at that time?

A It was -- it was working on a box blank, and what you are holding is a sample of the blank, a Girl Scout cookie box. After I saw the machine, I took a sample with me, I kept it. That's the sample that you are holding in your hand.

Q And do you know who made the notation on the sample box "12/19/72"?

A Yes, I signed my name on that, and I dated it, and I wrote the name of the place where I was at, Hankins. That's my handwriting.

MR. BERLINER: I ask that the blank of the box that the witness has just testified to, be marked as Exhibit Z.

I offer Exhibit Z in evidence.

MR. WYATT: No objection, your Honor.

MR. BERLINER: I offer Exhibits U, U-A and U-B in evidence.

MR. WYATT: Well, other -- I have no objection

to them going in just as photographs of the Universal device. As to whether or not they show the operation of that device, I object to them being submitted for that purpose.

MR. BERLINER: Well, your Honor, this machine was operating for many hours. We had no control over the operation. When you walked into the plant you saw the machine operating. You didn't know whether the pressures were proper, no one did.

THE COURT: All right.

THE CLERK: Defendant's Exhibit U, U-A, U-B and Z previously marked for identification, marked in evidence.

Q While you observed the operation of the accused machine at Hankins, did you observe any blanks entering the bottom of the stack during forward motion of the pusher?

A You mean did I personally see them aside from the picture I took?

Q Yes?

A The answer is no. I took a picture which showed that. However, I did observe that phenomenon at the Time Container Plant in Monroe, Michigan. That I actually saw, saw the blanks coming in.

In the Hankins Plant, the speed of operation was such that I couldn't personally see it.

Now, I took quite a number of pictures, I used up several rolls of Polaroid film. And it happens that the picture that you showed me a moment ago, Exhibit U I believe, happened to be one that caught the -- the blank coming into the stack during the push.

Q Mr. Cantor, I'd like you to turn your attention to the prior art. Have you studied the Hart and Hess patents of Exhibit 2?

A I am sorry, I didn't hear what --

Q Have you studied the Hart and Hess patents of Exhibit 2?

A Yes, I did.

Q Do either of these patents show a device in which articles are removed from the top of a stack while other articles move into the stack at the bottom thereof?

A They do no.

Q Will you please explain that?

A Yes, can I take them one at a time?

Q Yes, sir. You have your choice, Hart or Hess. Hart is Number 4.

A The Hart patent, which is tab number 4 -- your Honor, I am going to refer to several of the diagrams in the patent. I don't know how the Court wants to see it, whether -- I have my work work copy. If there is an Exhibit copy that is handy

I can point it out to the Court easier.

THE COURT: I don't know. Do we have an Exhibit copy? Okay, which one is it?

THE WITNESS: This is tab number four, the Hart, H-A-R-T --patent.

THE COURT: Okay.

THE WITNESS: Your Honor, this machine is a machine for blanking out or cutting out heels for shoes, and the way it works is a guy presses down against a stack of leather and picks up a number of pieces of leather, which then travels up the die.

The pieces of leather travel up and up and up.

Now, the diagram that you are looking at now, I believe is Figure 13. Does that correspond with what you are looking at?

THE COURT: 13? Let me see. Now, we are on 13, okay.

THE WITNESS: All right, now, the die comes down, punches the holes -- and you can see the holes -- and the pieces of leather are now moved up.

THE COURT: Moved up, yes, I see that.

THE WITNESS: Now, at that point, when the pieces of leather rise to the top, if your Honor would turn back one, two pages, to figure 9, now, in figure

9, you will see the top of the stack. At -- when the -- when the pieces of leather reach the top of the stack, you can see that the stack is not straight up and down, it's angled, it's skewed.

Now, when it reaches the point where enough pieces of leather are at the top of the stack, the guillotine-type of blade drops down and hits or touches the top one in the stack and tilts the whole business, tilts the number of blanks at the top of the stack.

Q What is the number of that blade?

A The blade is 56. Blade 56.

THE COURT: I see it.

THE WITNESS: Now, if your Honor will turn the next page, the page where it says Figure 11, you can see the guillotine blade coming down and hitting the edge of the heels.

THE COURT: Right.

THE WITNESS: And the heels now tilt into the vertical position. They are in dotted lines that show the heels tilted.

THE COURT: Right.

(Continued on next page.)

THE WITNESS: Now, after the heels tilt into the vertical position -- and they are -- they are not quite vertical but they are almost -- at that point the pusher, which is a long rod shaped like the hoof of a deer --

THE COURT: Right.

THE WITNESS: (Continuing) -- then comes ramming out, as shown in the next figure, on figure 13, and compacts or pushes the now vertical heels into the container, receiving container, where it's compacted with the other heels that have gotten there before.

So there is a three-step operation. This is done cyclically, it's done a series of steps. Number one, the die punches, number two the stack rises, number the the guillotine comes down and knocks off the top of the stack, it tilts them vertically, number four, the pusher compacts the already knocked-off heels into the container, retracts, then the machine goes to the next step and it punches another series of dies -- of heels.

Did that answer your question with respect to that question?

MR. BERLINER: Yes. That answers the ques-

tion.

BY MR. BERLINER:

Q Is the Hart patent a file rapper reference?

A Yes.

THE WITNESS: Your Honor, file rapper means that this is something the patent office examiner evidently considered. He listed it in the proceedings in the patent office.

Q Now, the Hess patent, which is tab 13.

A Now, the Hess patent, tab 13, if we can look at the figure 1, the very first page of that patent, that's a tab 13, Hess. What that is is a furnace for heating billets of iron. They are long strips of iron.

And the way this thing works, there is a cycle to go through. Step one in the cycle is there is a vertical cylinder underneath a stack of billets. That's cylinder 33.

Coming out of that cylinder is a -- is a piston. The piston shoves the stack up and holds it up.

THE COURT: Yes.

A (Continuing) Now, after it's shoved up and holded up. The top billet has come out of the top of the furnace. At that point a pusher rod or push rod comes across and shoves that top billet and lets the top billet fall down a chute.

Then at that point both the holder-upper and the pusher retract.

THE COURT: All right.

THE WITNESS: That's the cycle, and that cycle is repeated over and over again.

Q Is the Hess patent a file wrapper reference?

A Yes, it is. I might point out that this Hess patent -- there is no push into the stack. The same is true of Hart, there was no pushing during the time of the feed into the stack. In both the Hess and the Hart patents the things that do the pushing, the push rods, are not mounted for limited vertical movement. They don't have to perform that function.

Q I'd like you to turn your attention to the Greenwood and Ward patents of Exhibit 2, and in particular Greenwood. That's tab No. 8. Is Greenwood a file wrapper reference?

A The Greenwood patent is a file wrapper reference, meaning it was considered by the Examiner in the Patent Office.

The Greenwood patent shows a device for building up a stack for underfeeding and building up a stack which is then removed by hand, manually. So this shows an underfeed stacker. The --

Q Does Greenwood show straightening in the underfed stack?

A The Greenwood patent does not show straightening. It does not show the pushing function, it does not show the squaring of individual blanks in the stack, it does not show a slapper, it does not show a pusher mounted for limited vertical movement.

It simply shows only one element: namely, a stack being formed by the underfed -- underfeeding of blanks.

Q Have you studied the Ward patent? That's tab 19.

A Yes, I have. Ward tab 19, I think the nub of the Ward patent is best illustrated in figure 15, which is sheet 8 of the 10 sheets of the drawing.

Figure 15 -- this is what it looks like.

THE COURT: All right.

THE WITNESS: The Ward patent discloses, as relevant here, a device for forming an underfeeding stack where sheets of material are fed by a conveyer into a stack. It does not show the pusher that we've talked about, it does not show the squaring of the things being fed into the stack, it does not show a slapper plate.

Q Have you studied the Spiess reference patent?

That's tab 16 of Exhibit 2?

A Yes, I have.

Q Does Spiess show straightening in an underfed stack?

A No, it does not. The Spiess patent in general shows a device of the type that has already been testified to in this suit, namely the -- what was called the right-angle device. In essence what it is is this, if I can describe it in words rather than a picture. The -- the blanks are -- and this is for box blanks and for box blanks that are folded -- the blanks -- if the Court will look at figure 1 on the very first page, figure 1 is a top view. The blank is on the -- that's the L-shaped picture I've got here.

THE COURT: Yes, I see.

THE WITNESS: The blank is on the left with the No. 29 on it. Now, that blank moves from left to right in the picture. It moves along the center section, which is a folder. It folds the sides of a blank up.

Then the -- then the blank gets the right-hand corner, and at that point it comes out of the folder and falls down on top of a moving belt which goes up the paper.

The next blank comes in on top of it, and

the next blank comes in on top of that, to form a shingled effect. The blanks are shingled one on top of the next.

Now, at that lower corner where the blank falls in effect out of the folder and onto that belt that's moving uphill as we look up the paper, there is a plate, what is -- what is described as a reciprocating plate. That reciprocating plate, if we look at figure 7 and 8, that reciprocating plate is labeled as 150. Actually the plate itself is pivoted, but it's described in the patent using the word "reciprocating plate."

"Reciprocating transversely" are I believe the words used in the patent.

Now, that plate goes back and forth and does hit the edge of the box to try and straighten the box. Now, at this point the box has been glued, the glue has not been set -- like we've been talking about before. And the straightening or squaring plate hits it to straighten it up.

The deficiency here vis a vis the Shields patent is that the box that's being hit is on top rather than underneath the stack, so if it has any tendency to pop open it will do so. The folds

will open up.

And then the -- the straightening is really for nothing. Nothing is holding it straight, nothing is holding it from resiliantly bounding back into its unstraight position each time it is struck.

In this type of device when the glue seam doesn't hold and the two folds come up forming a V, the very next blank comes across, lands on the V, slides down out of the way and is more or less supported at an angle; and then the very next blank comes along and bangs into it, and then the whole business jams up because of this top feed.

This patent does not show an underfed stack. It does not show the function of using a stack to receive and to hold and to grip the blank while it is being struck by the slapper plate, so that when the blank is aligned by the slapper plate it's held aligned by the stack. It doesn't show that function at all.

And in that sense this patent would be quite similar -- in a schematic sense to the machine I saw at the -- at the Western Craft plant in Bellmar, New Jersey, the so-called right-angle

machine or right-angle bend machine.

Q At Western Craft did you also see an in-line machine?

A Yes, I saw the machine that corresponds to Exhibit -- the one that's showing right now.

Q This is Exhibit 12?

A Yes.

Q Turning back to Greenwood and Ward, do either one of them show the feeding of boxes into an underfed stack?

A Yes. Oh, boxes, no. Not boxes. Each of them shows sheets being fed in.

I don't think there is any contemplation in either of those of feeding in a box of the type we're talking about here.

Q Much less a box in which the glue joint is only partially set, is that correct?

A Correct, there is no showing of that concept in either of those two patents.

Q Have you studied the Evans reference of Exhibit 2? That's tab 7.

A Yes, I have.

Q Does Evans show an underfeed stacker?

A No. What Evans shows that has been said to be relevant here is best seen in figures 4 and 3 -- I don't know if the

Court has that handy. That's tab 7, and I am looking at figures 4 and figure 3.

THE COURT: O.K.

(Continued on next page.)

THE WITNESS: All right, now in -- in the Evans device actually what he's handling is sheet metal. These are sheets of metal. And the objective here is to not straighten out each piece of metal -- but actually straighten out the pilot metal, to actually line up allthe sheets in the pile.

Therefore he illustrates relevant to this case a slapper which is mounted in such a way as to strike the top of the -- of the stack, and to line up the top of the stack before removal.

And you can see in dotted lines and in solid lines where that slapper is arranged to reciprocate back and forth and to hit the stack. It happens the particular stack of arrangement shown here has a slapper which is a rather long element and is connected to a pivot way at the top. It's No. 22A, just underneath where it says, "Figure 4."

So the slapper is pivoted. And therefore it can reciprocate back and forth against the sheet metal edges. That's the part that I presume is relevant here, consistent with the testimony I heard.

It does not show -- this patent does not show the remaining concepts of the claim.

If we turn to the claim for a moment, it does not show nor does it suggest an underfeed stacker. It does not suggest the -- the arrangement for supporting the pusher plate. It doesn't have a pusher plate at all.

It does not suggest the -- the function of aligning a blank in the stack.

Q Thank you. Have you studied the Sheppard reference of Exhibit 2? That's Tab. 9.

A Yes, I have.

Q Is that a file wrapper reference?

A Yes, this is a patent, Sheppard, which is called a file wrapper reference, meaning that the Patent Office examiner did consider it in connection with his work on the Shield's patent application.

Q Does Sheppard show a device that removes articles from the top of an underfed stacker?

A No, sir, it does not. The -- the Sheppard patent is concerned with something quite a bit different than what we've been talking about in this lawsuit.

What it is is a -- is a digging machine or scraping machine like in a coal mine. It's set up, if I might step

off a moment, your Honor, and we can use that picture --

THE COURT: Surely.

THE WITNESS: Incidentally, your Honor might see it handier in Sheppard Tab 9.

THE COURT: I see, Tab 9.

THE WITNESS: Yes. Right, that's the one with the bicycle chains we were talking about.

What this machine is is this: this is a digging machine like you might use in a coal mine. This device here scrapes along the wall and does the digging or scraping or the moving.

Now, this device is connected to two chains. Those are the bicycle chain type arrangement. Now, those two chains are not vertical one above the other. They are set at an angle.

This chain here is -- it actually would be set in the way that I'm holding the paper right now, at a 30 degree angle, approximately. So what happens is that the -- the scraper or the shovel or the digger goes along and gouges out against the wall, and then when it gets to the end of its stroke and is retracted, because the chains are at an angle it now moves away from the wall and moves along a retraction path which

is away from the wall, and then comes back in and digs again.

So it does this sort of action: it scrapes the wall, comes up, moves away from the wall, then goes back and digs into the wall again.

It is a device for digging. It does not have an underfeed stack idea. It is not a stacker at all.

Q Have you studied the Jamieson reference patent of Exhibit 2?

A Yes, I have.

Q That is Tab 11?

A That is Tab 11.

Q Is that a file wrapper reference?

A Yes, it is. It is a patent which the Patent Office examiner did consider in connection with the Shields patent application.

Q Does Jamieson show a device in which articles are removed from the top of an underfed stacker?

A No, sir, it does not. This device, if we -- if your Honor will look at Figure 1 and turn it sideways -- it's a sideway view.

THE COURT: Yes.

THE WITNESS: This device has a -- has a

chain whose function is to carry bottles around in a bottle washing tank.

THE COURT: Yes, take labels off them?

THE WITNESS: Yes. No, not take labels off. This is a bottle washing machine for washing bottles.

Now, the tank itself I suppose gets filled up with debris, labels and so forth. Periodically the operator of the machine attaches this bucket shown in the right hand side --

THE COURT: Yes.

THE WITNESS: -- Bucket No. 13. He attaches that on to the chain. Normally he would attach onto the chain containers containing bottles. He attaches a bucket on there, and the bucket is attached to a rod.

THE COURT: I see.

THE WITNESS: So -- so that the bucket cannot be close to the chain, so it will get through the hole on the side. The front door of the machine is at 8.

See, he puts the bucket in through the front door, hooks it onto the chain, and the bucket now drops down to the position shown at

the right hand side. Then it drops down, it goes into the bottom below the chain, and because it's mounted on a rod, the bucket falls down against the floor of the tank.

Now it moves along the floor of the tank from right to left, and in doing that the curved part is open. It's like a fish net and it picks up the debris floating around near the bottom of the tank and on the bottom of the tank.

Now, when that bucket gets all the way over to the left hand side where the signatures appear, there is a door, 24, and the operator opens the door and pulls the bucket out. So the bucket doesn't go around and around, it's simply a one-shot sort of fish net arrangement for pulling out the debris from the tank.

The bucket here is not made to move up, it's really made to move down. It's made to fit through a narrow opening and then fall down and contact the bottom of the tank.

THE COURT: All right.

Q Have you studied the Crank reference patent, Exhibit 2, that's Tab 14?

A Yes, I did. That's Tab 14, your Honor.

Q Does Crank show --

THE COURT: Yes, the top one.

Q (Continuing) -- a device that removes the top portion of an underfed stack?

A No, sir, the Crank machine is a popcorn machine, and what it is essentially is this: it has a -- a donut-shaped frame, and part of that frame is lowered, depressed like a frying pan, like a circular frying pan. Popcorn is dropped into it.

Now, in -- there is a circular wheel type of thing that fits above the donut tray, and this circular wheel has many, many partitions.

THE COURT: Go ahead.

THE WITNESS: The -- the circle now has partitions sticking down against -- against and into the donut-shaped tray. The partitions, for example, are shown in Figure 4, your Honor. You can see these upside-down V's.

THE COURT: Yes.

THE WITNESS: Now, these partitions are right near each other. So the operator of the machine opens the door and throws in popcorn, and popcorn falls in between these partitions. Each partition is filled up with popcorn. As the

wheel goes around and the partitions move, the popcorn goes around the deep part of the donut where the hot fat is and the popcorn cooks and expands, and then is moved along by this wheel, which is like a conveyor wheel. It's like a -- a fan.

And ultimately after it's cooked, it's moved out of the depressed part of the cooker and up into a horizontal part, where it falls out through a hole, and you collect the popcorn out of the machine.

Now, the part which was said to be relevant here is this: the partitions, this -- these number of partitions all the way around attached to the circular frame, have to move the popcorn out of the cooking depressions, out of the frying pan area and -- and up the hill and around on the flat part where the popcorn is drained. In order to do that each one of these partitions has a -- a sort of movable portion. The partition is made of two plates. One plate is fixed and the other plate can move up and down.

So that as the plate moves along, it drops down to move thepopcorn, pushing it through the

cooking area, and when it gets to the area outside of the cooking area it will climb up and still move the popcorn between them. And the popcorn is now imprisoned or trapped between each pair of -- of these plates.

S.

eg2/1

A (Cont'g) Essentially it's a conveyor.

Q Have you studied the ~~cotton~~ Kottmann patent that is tab 15 of Exhibit 2?

A Yes, I have.

Q Does that show a device for moving the top portion of an underfed stack?

A No, sir, it does not. That is tab 15 -- that shows a chain link -- chain type of conveyor which is made like a ladder. It is just like having a rope ladder. This figure 1, the top figure looking at the side of the conveyor, you can see where loaves of bread are being moved along. You see a chain, there is another one in back of it. Between the two chains are the rungs that connect them just like a ladder and the loaves of bread are moved along by the rungs.

THE COURT: Yes.

A (Contg) It is like an overgrown Jacobs rope ladder. The part which is set to be relevant that the rungs in this case instead of being like a ladder, solid wood or strip of metal, it runs -- U shaped channels are made. The purpose of that is to permit the insert to enlarge the pushing area against the loaves of bread, but at the same time to permit the ladder -- the upper right hand side to go through the slot at the end without having something trailing along there by permitting the bread to get trapped.

As it comes to the end through the slot, the rung contracts, the extension goes back into the U and then goes through the slot and underneath the bottom of the machine and the bread keeps on going. I have done it backwards. What I said is correct, but is the other way around. It is from right to left.

Q Have you studied tab 17 of Exhibit 2, the Chandler patent?

A Yes, as a file wrapper reference considered by the examiner.

Q Does Chandler remove the top portion of an under-feed stack?

A No, sir, it does not. The Chandler patent from what I have heard in prior testimony has been said to be relevant in connection with figures 5, 6, 7 and 8 which are Exhibits here and I think it might be easier for the Court to turn that page in the book. It is tab 17 and turning to the third or fourth page of the drawing where it is labeled "Figure 5."

The Chandler patent which looks like a croupier's rack -- in that device there is a catcher for catching sheet material -- magazines in this case, coming down and dropping in one on top of the other into the catching mechanism and after a certain number have been stacked up -- the patent says ten -- a counting mechanism counts the number of magazines

dropping in and after this number goes through, like ten, the counting mechanism triggers the rack from beneath the -- all of the sheet material, all the magazines collected.

It shoves the stacks from one side to the other and gets rid of it. I believe it was set to be significant only as far as the pusher operated by means of a counter.

THE COURT: I understand.

THE WITNESS: It does not show an underfeed stack, it does not show the idea of straining a plank in the stack, it doesn't show a stack to hold, does not show a slap plate and so forth.

Q You studied the Ghostein patent, tab 23 of Exhibit 2?

A That is the very last patent in the book, tab 23.

Q Does Ghostein show a device for forming an underfeed stack of boxes in which straightening of the box panel takes place in the stack while the stacking is rising?

A No, sir, it does not. That in effect amounts to taking a pallet of sheets -- large sheets resting upon a support and cranking this up in a frame using a chain house. As the sheets get near the top of the frame --

MR. WYATT: May we have a line of objection. They are going along as if we cited it as a prior art. We cited it for the purpose

of showing our pusher operate in the same way as Figure 3. We merely adopted what was in the prior art which we are allowed to do.

MR. FABER: You also said it was applicable to underfeed stacks of boxes --

MR. WYATT: That was the purpose we put it into evidence and it was testified to.

THE COURT: Not for the stacking or rising.

MR. WYATT: No, your Honor. It was for that purpose that we used what was well known in prior art.

Q Mr. Cantor, do you have anything more to say about Ghostein?

A No, I think I have answered the question unless you have more.

Q To your knowledge, does the prior art show straining of box panels in underfeed stacks of boxes?

A I have not found any.

Q To your knowledge does the prior art show means for forming an underfeed stack combined with means for removal at the top of the stack or continuing to feed into the bottom of the stack?

A I have not seen that among the prior art that I have seen here.

MR. FABER: Your Honor, may I confer for just a moment?

(Pause.)

MR. FABER: Your witness.

CROSS EXAMINATION

BY MR. WYATT:

Q Initially, Mr. Cantor, can you tell me, have you ever seen a machine owned or operated or manufactured by the defendant S&S that is the same as the device shown in Figures 1 and 2 of the suit patent?

A I am sorry I will have to qualify my answer. If you mean it shows the same arrangement, operation, same function, same structure, yes.

Q The same structure -- have you ever seen that machine before in actual operation?

A Yes, with this exception that the drawing of the patent is not precisely the drawing I am looking at. Specifically, figure 1, lower left hand side is not precisely the same. The slapper was more modernized.

Q Can we summarize what you said:

You have never seen one constructed the same as 1 and 2?

A If you are saying figures 1 and 2, the answer is

correct.

Q You have never seen one like it.

Isn't it true that you never saw one as a spiral mechanism for lifting the planks; isn't that true?

A Yes or no. All of them had a spiral mechanism.

Q You have never seen them without the spiral mechanism attached?

A Yes.

Q That spiral mechanism lifted the planks -- the underfeed into the spiral mechanism?

A Yes -- you are not being correct, counsel. That is not correct. I will have to describe it to you my way.

Q Go ahead.

A The spiral consists of two vertical screws on opposite sides of the stack near the entrance end of the stack. The spirals lifted the box planks and made rungs so the plank entering into the stack had a place to get in --

Q In other words, as it came in the spiral lifted up the prior plank so when a plank came in there was an open space for it?

A No.

Q What was there?

A There was an open space near the lead end, but the plank had no open space near the far end. It had a place to

get in, but it had to shove its place in.

I will have to reword that. The plank opened up a hole--it opened up a hole where the plank could go in underneath the stack.

MR. WYATT: Would you please mark this as Plaintiff's Exhibit 35 -- it is an S&S bulletin -- with particular reference to the fourth page which has two reproductions of a photograph.

One marked "delivery section" and the other marked "spiral lift screws."

THE CLERK: Document marked for identification as Plaintiff's Exhibit 35.

(So marked.)

MR. WYATT: I offer it into evidence.

MR. FABER: No objection.

Q Can you tell me if all the S&S devices you saw had that spiral life device shown here on page 4 of Plaintiff's Exhibit 35?

A I don't know.

Q What did it have if it didn't have that?

A I don't know what --

Q You do not know what all the devices are?

A I only seen half a dozen or ten of them.

Q All of these did have spirals on them?

A Either had them or a place for them.

Q There were spirals -- not a place for them. They were actually there?

A No. There was one that did not have it on and the rest did.

Q Where did you see the one without spirals?

A At the plant.

Q What plant?

A S&S.

Q Do you mean one in the process of being manufactured?

A It was completed.

Q Without the spirals?

A No, no, it had a place.

Q Just hadn't been put in place; is that what you are saying?

A Apparently taken out for testing.

Q This was not a machine out in a customer's plant without the spirals?

A Correct. The ones I saw in the customer's plant did have spirals.

MR. WYATT: Your Honor, on plaintiff's Exhibit 35 it shows the type of mechanism that your Honor saw over at Saddle Brook, New Jersey,

at the Enterprise Plant with the spiral lifting mechanism.

Q Now, can you tell me with reference to figure 1 of the patent in suit -- can you tell me what structure described in the shield patent in suit supports the pusher plate in a vertical position as it moves longitudinally to push off a top part of the stack? What is that structure?

A Figure 1?

Q Yes.

A The part that is labeled 90.

(Continued on next page.)

Q That part 90 -- this plate here by itself holds it in a vertical position and nothing else? Just hangs up in the air all by itself and stacks in a vertical position; is that what you are telling us?

A No.

Q What else holds it then, the bicycle chains -- a combination of the bicycle chains and this plate?

A Yes, of course.

Q Of course it is.

Now , I ask you to turn to -- I ask you to look at Plaintiff's Exhibit 5A which is the production model of Plaintiff's device and I ask you to point out there specifically where you find the structure and means for supporting the pusher plate so that it remains in substantially a vertical position as it moves longitudinally or horizontally?

A It would be hard -- may I have that sketch which I drew before?

Q I am referring you to Figure 5. Please tell us as to figure 5 where that structure is. I am asking you there. Tell us if you would.

A I am sorry, some of it is not shown. The slot and trunnions are not shown. I could show you in the sketch or describe it to you --

Q I thought you said your sketch was the same as 5A?

A No, I made that right here in the Courtroom.

Q You are talking -- Mr. Cantor, I would like you to tell me on Exhibit 5A.

Would you tell me what parts are the parts that support the plate?

A The plate is supported by number one, a cylinder which receives the rod upon which the plate is mounted and that cylinder is supported upon a cross rod which is labeled point A on Exhibit 5A.

Q Right.

A In addition -- this part is not shown on the drawing that is the sketch I made. In addition the support means includes the trunnions or studs which extend from the cylinder out through slots in the vertical plate. The plate is shown here, but the slots aren't.

Q Do I understand that that's the structure that you find which is a longitudinal plate which -- that's the means for supporting the pusher plate so it remains in substantially vertical position; is that correct?

Are you sure that that's that structure and nothing else?

A I don't follow your question.

MR. WYATT: Would you read it back to him, please.

(Record read.)

THE WITNESS: Rephrase the question. I don't understand it.

Q You understand that that is the structure on the plaintiff's device shown on Plaintiff's Exhibit 5A that holds the plate in a substantially vertical position while it is longitudinally movable to push off the top of the stack; is that right?

A Yes, essentially.

Q All right.

Would you tell me what structure you find and point out very specifically, other than what you just pointed out here, that is structured for supporting the pusher plate for vertical limited movement relative to the means for supporting thepusher plate?

You just told us what it means as to supporting the plate. Tell us what supports the plate for limited vertical movement?

A The same.

Q The same structure; is that correct?

A The limited vertical movement is obtained by means of the fact that the cylinder is pivotally connected. Also the cylinder forward end is supportred by trunnions or studs in those slots I talked about.

In addition --

Q Yes, go ahead.

A I am sorry.

Q Do I understand you correctly then -- I am -- am I correct in understanding that you are telling us that it is the same structure in Plaintiff's Exhibit 5A that does both? It supports the pusher plate in a vertical position and it is longitudinally movable and at the same time the structure -- the structure which supports the pusher plate for limited vertical movement, relative to the means of supporting the pusher plate, is that what you are telling us?

Is there a non-sequator here in your testimony? How can that be so?

A I am sorry, I am just describing what I saw. The pusher plate is supported -- maybe I should repeat this:

It is connected to a rod which in turn goes into a cylinder which on the opposite end is pivotally mounted on a cross bar of the machine. That also has these trunnions that fit through slots and plates. That alines the pusher plate essentially vertically or up and down.

The vertical movement is obtained because the cylinder will pivot about that pivot point.

Q You are saying the same structure fits both of these portions of the claims?

Let me point out the claim to you.

The longitudinally movable pusher plate --

A Yes.

Q Okay.

Now, you are saying that our device has means for supporting the pusher plate so it remains in substantially a vertical position? Do we have means for supporting -- does Plaintiff's Exhibit 5 show means for supporting the pusher plate so it remains in substantially a vertical position; is that correct?

A Yes.

Q If it remains in substantially a vertical position you are telling us it is the exact same structure that fits the following requirement:

Said pusher plate being mounted for limited vertical movement relative to the means for supporting the pusher plate--

MR. FABER: I object to the characterization of the witness' testimony. I believe it is incorrect.

Please ask him a question.

THE COURT: He says it is a question.

A Yes, that is correct. I might say this: if you are finding some non-sequator, as you put it, the anchor that is the part labeled point A.

Q What does that do?

A It's a crossbar in a sense. Upon that is the cylinder --

Q Yes.

A -- if we start at that point -- the base point, then the up and down movement relative to that point and vertical position --

Q If it goes up and down, how can it be vertical?

A Point A does not. The part that does is the cylinder.

Q Let me read the claim to you again:

Means for supporting the pusher plate so it remains in substantially a vertical position.

Now, if that is true, how can the same means be pivoting the pusher plate? It can't be remaining in a substantially vertical position if it is pivoting about that point?

A I am sorry. I don't follow you. Have you got that sketch that I drew?

Q Just stay with this.

A This is what happens --

Q Please do not draw on that. I would like you to answer my question as best as you can with reference to figure 5A.

MR. BERLINER: If the witness wants to sketch, I think the attorney should keep quiet

until he gets the sketch.

THE COURT: He wants him to answer from the drawing.

THE WITNESS: What you have here is this: you have a slot now --

Q No, no, you are going off now, Mr. Cantor. You are going off.

MR. FABER: I object.

THE COURT: Let him answer.

MR. WYATT: I am sorry. Do not mark that drawing up any further.

THE COURT: Let us take a five minute recess.

(Recess taken.)

(Continued on next page.)

Q Now, Mr. Cantor, in referring to Plaintiff's Exhibit 5A again, the Universal production model, is there any movement, vertical movement, between the pusher plate, which I believe is marked R, and the piston that uspports it?

A Piston rod you mean?

Q The piston rod that supports it.

A No, sir.

Q Is there any vertical movement between the pusher plate R in figure 5A and the cylinder that supports the piston rod?

A Agin no. Now you're referring to the horizontal piston rod and cylinder, because there is one -- there is another one.

Q I am talking about 5A, Mr. Cantor.

A No, there are two pistons and two piston rods.

Q I am talking about the main cylinder that's marked S and the piston that comes out of there that supports the --

A All right, we're both talking about the same thing, I understand.

Q Right. So there is no vertical movement between that point and that piston rod and piston cylinder?

A Correct.

Q Now, referring back to figure 1 of the Shields

patent in suit, there is vertical movement between the plate 92 and that supporting plate 90, is that correct?

A There may be, yes. The plate 29 is -- is mounted for a limited vertical movement.

Q It slides up and down on the backing plate 90?

A Relative to the backing plate 90, right.

Q And this plate 90 is mounted for vertical movement by this bicycle chain, is that correct?

A Correct.

Q Right. Now do you say that this combination of this bicycle chain which mounts this plate for vertical movement in a horizontal direction with a vertically slideable pusher plate 92, that that structure -- or let me put it to you -- your Honor, may I strike that and start thatquestion again?

Do I understand, Mr. Cantor, from your direct testimony that you're saying that on your pusher with a cylinder, which pivoted back here at pivot point A, a numerically operated cylinder that moves out horizontally is that same structure shown in figure 1 of the Shields patent, which shows this pair of bicycle chains with a plate, backing plate 90 and a slideable plate 92?

A Yes, I am, within the context of the claim in suit.

Q What context is that? In other words you are

saying that your claim has enough scope to cover this, even though the mechanisms are completely different? I don't follow what you mean by the word no scope.

Q Well, would you tell me what you meant by the context of the claim?

A All right, the claim itself, if we turn to the claim --

Q Yes.

A -- which is shown on --

Q Well, here's the claim right here. It's marked as Plaintiff's Exhibit 20 -- What do you mean by in the context of the claim?

A I am looking at chart number four, which is easy for me to read, it's in front of me.

Q Right.

A That claim talks about -- this is -- I am reading from clause six, element six: "A longitudinally moveable pusher plate."

Q That's 92 when you read the claim in light of the specification.

A Correct.

Q Yes.

A "Four periodically pushing a top portion of the stack of said blank from the said accumulating device." And that's found in both devices, whether the plate is mounted

on it or anything support 90 or whether it's mounted through the arrangement of cylinders.

Q Well, isn't it true that a claim is read --

A Let me finish please.

Q Yes.

A Now, the claim further says, "And means for supporting said pusher plate so that it remains in a substantially vertical position when in contact with said blank stack."

Q That's the bicycle chain in figure 1, is that right?

A Let me finish. Now that element, that mechanical element of the claim --

Q Yes.

A -- in the case of the drawing -- and incidentally there is no -- well, let me finish: In the context of the drawing it's the means that supports the pusher plate 92 in substantially vertical arrangement --

Q Is the bicycle chain, is it not?

A Is -- I'm sorry, counsel.

MR. FABER: Your Honor, would you please instruct the attorney to permit an answer to be given?

THE COURT: He's asking a question.

MR. FABER: He's just breaking in.

THE WITNESS: The means that's supporting that plate 92 consists of several different parts.

Q Yes.

A Those several parts comprise the vertical arrangement 90, the orange part, call it, on the drawing --

Q That's the support plate?

A -- and in addition that orange part is pivotally connected with some links, 94 and 95 to the two horizontally arranged, one above the other, bicycle chains.

Now, in the accused device the means for supporting said pusher plate -- and I am reading again from the claim, within what the claim says.

Q Right.

A "The means for supporting said pusher plate so that it remains in a substantially vertical position when in contact with said blank stack consists of a collection of parts also. That collection of parts includes the point A that I marked on the drawing, the transverse rod, --

Q That's the pivot point?

A -- about which the cylinder, the horizontal cylinder is pivoted. It also includes the slot, the bottom of the slot on that plate in which those trunnions or studs rest.

Now, the trunnions or studs rest upon the bottom of the -- of the slot. That's what keeps --

Q Sure.

A -- the plate and keeps the piston rod and the cylinder from dropping down.

Q Sure.

A Now, in case -- in the case of the rising, in the terms of the claim, "Said pusher plate" -- and I'm reading from the claim, "Said pusher plate being mounted for limited vertical movement relative to the means for supporting the pusher plate."

Now the pusher plate is riseable, it is mounted for limited vertical movement relative to the thing that keeps it horizontal in the first place. And the thing that keeps it horizontal in the first plate are these parts that I mention: The slot, the bottom of the slot which the trunnions rest, and the rod or cross brace upon which the cylinder is pivoted.

Relative to those devices that pusher plate is mounted for limited vertical movement.

Q All right, Mr. Cantor, that mechanism you just described in Plaintiff's Exhibit 5A is completely different than that mechanism in figure 1 of the drawing, isn't it?

A If you're talking about physical structures, physical devices --

Q Right.

A -- of course they are different. You can see them.

Q And there is no one structure that's anywhere near the same other than the fact that both have a pusher plate, isn't that correct?

A I'm sorry, counsel, they are the same, they differ.

Q What --

A Let me finish.

Q Will you --

A Let me finish. You asked me a question, let me finish.

Q You have been going on, Mr. Cantor, the afternoon is getting short, please.

THE COURT: About ten more minutes of this case because I have to be upstairs at four-thirty.

THE WITNESS: Structurally of course --

THE COURT: We don't have much more time.

THE WITNESS: Structurally of course they are different.

Q They are completely different, aren't they?

A No, they aren't different, they are the same functionally. To an engineer these things are precisely the same, they do the same job. They are simply different.

Q Are you saying that an air cylinder and a piston are to an engineer the same thing as a bicycle chain with a plate mounted on there, is that correct?

A Of course, if they perform the same function, if they perform the same function, of course.

Q That's your testimony they are the same.

A They do perform the same function here, they are the same here, they do the same job.

Q They do the same job, okay. Okay, in other words you are interpreting claim 1 then with the scope that would include our mechanism, is that -- is that your testimony here?

A I am not interpreting claim 1, counsel, i am telling you that these two devices are the same in the function of what they do in this device.

Q But the structure is entirely different, we have agreed on that.

A Of course they are different. They look different. They do the same job. They are for the same purpose.

Q Mr. Cantor, assuming this device here . . figure 1 to be designed for a fifty inch box blank the minimum distance of travel of this pusher 92 would have to be at least fifty inches, wouldn't it?

A A little more than that, yes.

Q Or more than that, so that total travel would be more than a hundred inches, maybe one hundred twenty inches, wouldn't it?

A By total you mean back and forth?

Q In other words, -- yes, by the time it got all the way around here it would go at least one hundred twenty inches, wouldn't it?

A Yes, it would have to go double whatever the pusher is. The retraction would be the same distance.

Q Now, Mr.CAntor, if you could put your charts before you -- I see you do have them before you.

A Yes.

Q -- And I refer you initially to your chart 2. And I notice that the chart 2 shows figure 1 of the patent, which is here, your Honor. In fact I can talk about figure 1 of the patent. This patent through the claims that there are blanks, plural blanks being fed underneath, isn't that correct?

A Claim -- claim 1 mentioned that, yes, sir.

Q But I notice that the top of the blank here is right at the top of the stack, there is no rise shown in that stack, is that correct?

A I'm sorry, I don't understand that question now.

(Continued on the next page.)

Q Well, the patent throughout says the big thing about this invention is that the stack is rising.

A Yes.

Q Well, where is the rise in the stack shown? Here the pusher plate has moved from the beginning halfway across.

A Oh, I see what you mean.

Q And we see no rise in that stack.

A You mean there should be another blank?

Q If they have blanks push it up.

A You mean there should be another blank?

Q If they have blanks push it up.

A If a blank had already entered the top of the stack below the pink it should have been one blank higher, obviously.

Q Now, if you turn to chart 3, if you would, of your charts. Chart 3.

A Yes.

Q And I notice on the right-hand side where you describe the operation down in No. 8, you said, "Thus the cycle consists of," and in describing the device of the

(Continued on next page.)

Shields patent --

A Yes.

Q And under 8V it says, "Intermittant removal of the file."

A Yes.

Q You read the file history?

A Yes.

Q Didn't the patentee argue that this motion was not intermittant motion?

A Not --

Q Didn't they argue to the Patent Office that this was not intermittant motion, that I described in the Shields patent? Yes or no, please.

A Show me what page you're talking about.

Q I'm talking about file wrapper amendment, about page 6. I thought you had read the file wrapper.

A I didn't memorize it, I just read it.

Yes, now what's the question? I have the place.

Q You've described the Shields device as a cycle that consists of intermittant removal of the stack, and the patentee's attorney argued that it was not intermittant movement. Isn't that correct?

A No, that's not correct.

Q No? Well, then what did the patentee argue?

A He argued -- this was in connection with different claims, by the way, not the one in suit. The argument was based upon claims 3 and 6-8, which are not the ones involved in this lawsuit.

But as to those claims, this is what he argued. He argued that the Hess patent and the Chandler patent are operated intermittantly -- the Hess and Chandler patent use a cylinder -- a cylinder-type device, thereby making them totally unsuited for a high-speed stacking device such as illustrated in the instant application.

And he explains what he means by that. His explanation is that "a member operated intermittantly under conditions of high-impact loading will soon fail."

And then he goes on further to explain what this means: "Further, neither the Hess nor Chandler ejector means is constructed so as not to interfere with the stack, which is rising even as the ejecting operation is taking place."

Q Well, didn't the patentee argue that the ejection means of both Hess and Chandler patents are operated intermittantly?

A Yes, he said that.

Q He did say that? And did he say that his is not operated intermittantly?

A No.

Q Well, I'm not going to take the time to find it.

So in other words it's your testimony that the Shields patent operates intermittantly; is that correct?

A Not that the patent operates intermittantly, no, the --

Q The device in the Shields patent operates intermittantly; is that your testimony?

A No, it operates continuously.

Q Then it doesn't operate intermittantly?

A Part of it operates intermittantly.

Q What part?

A The pusher. The pusher operates intermittantly.

Q It's your testimony then that the pusher operates intermittantly? Let's get that straight.

A It operates periodically or --

Q Fine, it operates periodically.

A It operates for a time and then it doesn't operate. But the device itself is a continuous operating device.

Q That's fine. Now, I notice that in your direct testimony you mentioned that the pusher of plaintiff's Universal devices displaces the top portion of the stack; is that correct?

A Correct.

Q And then I notice in your various charts you

talk about the pusher pushing off the top portion of the stack.

A Will you show me where that is, please.

Q Well, for instance if you will turn to -- If you will turn to chart 6, and it says, "For instance under 9 pusher plate operates to remove a pile of blanks." Does the Universal pusher plate --

A I'm sorry, I didn't quite catch you.

Q Let me rephrase the question, Mr. Cantor, because we don't have much time. Does the pusher plate of the Universal, plaintiff's Universal devices, operate to remove a top portion of the blanks?

A Yes.

Q Tell me how it removes the top portion of the blanks.

A It pushes against the upper part of the stack and in effect segregates and displaces a collection or a bundle of blanks which are at the top of the stack. And it pushes them. It displaces them off the verticality of the stack.

Q Well, now, let me read again to you in figure 1 of the Shields patent the part that: The pusher plate pushes the top portion of the stack off the stack, isn't that correct?

A Correct.

Q Right. Now, in the Universal device the pusher plate displaces it five inches, isn't that correct, or so? Five inches as --

A Whatever it is.

Q Right. And then the pusher stops, does it not?

A Yes.

Q And then in the Universal device it is necessary to have these vertical drive rolls to pull off the top part of the stack, isn't that correct?

A It's correct except for small boxes. Small boxes I think -- for example a 10-inch box would probably get shoved right off without --

Q How do you know that? Have you ever seen them shoved off?

A No, I'm speculating --

Q Please don't speculate.

A Let me finish, please: I'm speculating on the action that I saw. I saw that plate come out and give the box a real ram. I presume it would move it off.

Now, in the larger boxes the pusher plate works in cooperation with displacing the stack and then to have the grab rolls remove that displaced portion.

Q So in claim 1, claim 1 requires: "One of the plates being periodic" -- I'm sorry, excuse me, your Honor,

may I strike that.

Claim 1 requires, "A longitudinally movable pusher plate for periodically pushing a top portion of the stack of said blanks from the accumulating device."

Now, in the Universal device is that portion of the claim met by the pusher plate or does it also require the vertical drive belts to remove the top portion of the stack?

A In my opinion it's met by the pusher plate.

Q Just the pusher plate alone, that's all that's necessary to meet that portion of the claim? We don't need the vertical drive belts?

A No, I don't say we don't need them. For the purpose of the claim --

Q Yes?

A (Continuing) -- that is all you need is the pusher, because here's what the claim says --

Q That's all that I want to know.

A Let me finish, please.

MR. FABER: Will you ask this attorney not to interrupt, please.

THE COURT: But this is a question, that's all. He feels he has his answer. That's all there is.

THE WITNESS: The question is -- all right.

Q Now, so in your opinion in order to have a pusher plate, a longitudinally movable plate for periodically pushing the top portion of the stack of said blanks from the accumulating device, that's completely met by the plaintiff's pusher, and you don't need the vertical drive rolls to pull it off; is that correct?

A If by that question you mean --

Q Yes.

A (Continuing) -- does the pusher found on that exhibit, Exhibit 5, whatever it is, meet the description of what is here in the clause of the claim, the answer is yes. The claim says, "a longitudinally movable plate for periodically pushing," and so forth.

Q Right.

A And that's exactly what that plate is for.

Q Well, keep reading. "For pushing a top portion"--

A "periodically pushing a top portion."

Q From the accumulating device," does it not say that?

A That's what it's for, pushing --

Q Does this pusher in plaintiff's -- in any of plaintiff's Universal devices -- does the pusher in any of them actually do anything more than displace the top portion of the stack?

A As I understand it it displaces the top portion of the stack.

(Continued on next page.)

Q And the vertical rollers actually remove the top portion of the stack?

A Thereafter.

Q Thereafter.

A But the plate is doing this and that is what the plate does.

Q The plate displaces the top of the stack?

A The plate pushes for removal. That is what the plate is functioning as.

Q And that includes in this last portion of the claim where it says:

"...said stack being fed with blanks as the movable plate is removed said top portion of the stack..."

It is your testimony that that portion of the claim is completely met by plaintiff's Universal pusher? Is that correct?

A Yes.

Q And it doesn't require the vertical rollers to meet that part of the claim?

A In terms of claim language, that is correct.

Q What other terms would that not be correct?

A I think if you are handling larger boxes meaning -- I don't know exactly where the division would be. It would

depend upon the smoothness of the material. But as the boxes get larger since the pusher plate has a limited travel, the pull rollers work with the pusher plate to finish the job of removing.

Q But you have already testified you have never seen the small boxes push off just by the pusher? Is that correct? You have already testified to that, haven't you?

A Well, the way you worded it -- let me tell you what I didn't see. I didn't see the device operated without the pull rollers. Does that answer your question?

Q That's fine.

NOw, referring to these photographs that you took, Mr.Cantor, that have been marked as plaintiff's exhibit, I think it is U, for identification and UB and UA.

Did you take those photographs?

A Yes.

Q Can you tell me what the speed of the machine or how many blanks were coming in at the time you took those photographs?

A No, I can't. I don't know.

Q Do you know what pressure the pusher cylinder was operating at when you took those?

A I don't know. All I can tell you about the thing I took pictures of is that the thing was normally operating in

the sense that it was operating the same way when I took the pictures as when I came into the shop.

Q Was the pusher moving faster than the infeed when you observed it?

A I am sorry. I didn't get that.

Q Was the pusher moving faster than the speed of the blanks coming in?

A I don't know. I have no way of judging.the speed of those things because I didn't have instruments to measure it.

Q I refer you to defendant's Exhibit DU, which is one of these photographs, defendant's Exhibit U, and can you tell me whether or not there is a blank entering there?

A Yes, there is.

Q And the blank is almost already in, is it not?

A No, that is not correct.

Q Where is the leading edge of the blank? Can you tell me where it is at?

A I can point to it. I believe it is here (indicating).

Q That is ahead of where the pusher plate is? Right?

A Yes.

Q Now, at what stage of the pusher action is that? Has the pusher completed its stroke?

A As near as I can determine, the pusher seems to be

just at the end of its stroke.

Q At the end of its stroke. The blank is already fed in well ahead of it, ahead of the pusher?

A The blank is partly in, yes.

Q And you don't know whether the blank is faster or slower than the pusher? You have already told us that, haven't you?

A I don't know. In terms of visual observation I suppose it must have been. But I don't know what the speed is.

Q Did I understand your testimony earlier, Mr. Cantor, that you actually saw blanks, more than one blank coming in, while the pusher was in operation?

A Yes, sir.

Q Two? Three? You actually saw two or three blanks coming in, Mr.CAntor?

A Yes.

Q How fast was the machine operating when you saw two or three blanks?

A I have no idea.

Q How many did you see coming in there at Henckens?

A I didn't.

Q They were coming so fast and the pusher

operated so fast? Isn't that correct?

A Essentially that is correct. I didn't see it.

Q Do you mean -- that pusher operates quite fast, doesn't it?

A Yes.

Q Do youmean you were able to actually see two or three blanks coming in at a tremendous speed and count them one, two,three? Is that your testimony?

A Not at Henckens.

Q No. Elsewhere?

A Oh, yes, in Monroe.

Q So they much have been coming in much faster than the speed of the pusher?

A You mean two blanks during one push?

Q Yes.

A No.

Q You have never seen more than two blanks coming in under one push?

A I saw only one coming in.

Q Maybe you saw one blank coming in. You certainly have never seen blanks?

A I did see one coming in during the push.

Q One blank?

A But then I saw the same thing happen a numberof times.

Q Ah, but you never saw more than one blank coming in on the one push?

A During one push?

Q Right.

A No, I did not.

Q Where was the position of the leading edge of the blank when it came in when you saw the push?

A I would be hard-pressed to answer that question.

Q You would not know where it was?

A No, I really don't. It was coming --

MR. WYATT: Excuse me, your Honor, I will just be a moment and then we will be finished.

Just a couple of more questions, your Honor.

Q Mr. Cantor, I refer you to your chart in set No. 8, and I notice down at the very bottom of that page on the left and right hand side you show this pusher in Figure 1 during the time it is returing. For instance, you say down in here, "...the pusher plate is lifted up in retracting..." and on the right hand side you show the Universal device when it is pivoting up and out of the way.

There is no mention of that particular action in the claims, is there, where at the end of the stroke it is moving up and out of the way?

A No. There is no mention of those words in the claim.

Q So in other words that portion of the drawing is superfluous, isn't it?

A No, I wouldn't say it is superfluous.

Q Why is it of significance?

A To show that the both devices perform the same function and the same operation.

Q But there was nothing claimed here about that particular function or operation, is there? There was nothing in Claim 1 that refers to that specific operation?

A To the retraction operation?

Q Yes.

A Not as such, no.

(Continued on next page.)

Q All right, now, Mr. Cantor, you testified as to the identity of the accused machine to the patent by saying that the pusher plate is "...mounted for limited vertical movement..."

Now, my question is this: if one used the pusher system of the Sheppard patent which is shown here (indicating) to push box blanks off the top of a stack, wouldn't this be a pusher plate mounted for limited vertical movement in the sense of your use of these words?

A Yes and no.

The Sheppard device is tilted at an angle. The picture is misleading.

The Sheppard device is not vertical. It is tilted at an angle. And its purpose is to provide an in and out motion.

Therefore I do not think anybody would use that kind of device in that kind of arrangement tilted at an angle.

Q But it would not be difficult for anyone skilled in the art to just make it vertical, would it not?

A It depends who you are talking about.

If you are saying though this Sheppard device showed a pair of bicycle chains which move something, in this case a scraper, which it does, of course.

Q Now, the final point, Mr. Cantor, I refer you to the Evans patent, and I ask you whether or not that spanker

plate 22 is pivoted about that point 22A?

A I understand that it is.

Q And how would you describe -- if you were to take a point on the bottom of the pusher plate as it moved back and forth, would that be an arcuit motion, an arcuit path?

A It would be a slight arcuit path around the center of the pivot point.

Q Now, referring to the motion of the spanker of the patent in suit, which is shown here in figure 1 as the motion of plate 20 and 20A that moves back and forth, and doesn't describe an arcuit path, is that correct? If we drew a line here it would be a line back and forth?

A No, not really. It also has a slight arcuit motion.

Q How does it have an arcuit motion?

A The squaring plate or slapper plate is mounted about eccentrix.

Q Right.

A And because it is mounted about eccentrix, pivoted on the eccentrix, the motion would be back and forth. But there would be an upward component too.

Q Will you show me on that drawing? I ask you to mark it on here (indicating). What structure would give that spanker plate 20 an upward motion? Please mark it.

A Let me check it.

If you can see it, there are Brackets 15A and 14A, and I am reading --- I am locating the specifications.

Q Right.

A That is found in column 2, lines 28 and 29.

Slapper plate 20 are mounted about eccentrix 14 prime and 15 prime. And you can see these double looking circles (indicating).

Q Yes, I understand that. That is what moves it in and out. But what moves it up and down?

Will you point to the structure that moves it up and down?

A The up and down is when you are on an eccentric, an eccentric going around in the circle tends to have an up and down motion.

Q I understand that. I am asking you to point to the structure that gives it up and down movement.

A The eccentrix 14 and 15 prime, and the brackets 14A and 15A.

Q Is it your testimony that those eccentrix 14 prime and 15 prime move it up and down? Is that correct?

A It gives an up and down component to the motion.

Q It gives it an up and down component?

A It is a backward and forward, and a slight up and down.

Q Well, will you point to the particular part of the eccentric of 14 prime and 15 prime that give it an up and down motion, please?

A It is not a part of it. It is.

Q In what part of it? I see the eccentric 15 prime and another one next to it that goes right and left but I do not see anything up and down that is going to move that plate up and down?

A The eccentric goes around.

Q I understand that. And it is going to move that plate in and out in a reciprocating direction, is it not?

A Well, yes it does.

Q You are saying it goes up and down like that (indicating)?

A Let me check that please.

Q Because if it was up and down, would it not shut off the entrance and not allow the blank to enter if it were up and down? Does it move back and forth in a reciprocating direction? Isn't that correct?

A No, it wouldn't shut that off. It doesn't move up and down that much.

Q Well, how much does it move up and down? Show me on the structure.

A Let me read what it is here and I can give you the

answer right from here.

"Brackets 14A and 15A extending rearwardly from slapper plate 20 are mounted to eccentrics 14 prime and 15 prime respectively which are mounted to wheels 14 and 15 respectively."

Now, do you have 14 and 15 there?

THE COURT: Yes.

A (Contg) These eccentrics cause a periodic reciprocating or longitudinally oscillatory movement of slapper plate 20.

Q Longitudinal is in this direction (indicating)? Right?

A Longitudinal means going from me to you.

Q It means from 20 to 20 prime on the drawings, does it not?

A Yes.

Q Where is the up and down movement you are talking about?

A As I understand the eccentric, the rotation of an eccentric, a cam like rotation.

THE COURT: If you don't want to finish your case, I have got to go. I have a conference calendar.

MR. WYATT: Your Honor, we have no further questions.

MR. FABER: I didn't hear what you said.

MR. WYATT: I said, no further questions.

MR. FABER: I have no further questions.

Plaintiff rests.

MR. WYATT: Defendant rests.

THE COURT: Everybody rests? Submit your trial briefs and I will make a determination.

MR. FABER: As to briefs, our suggestion is 60 days to exchange and 30 days reply exchange. All right?

THE COURT: .It is all right with me. I don't care.

The chief judge has already sent me a note.

MR. WYATT: Thank you for your time, your Honor.

- - -

I N D E X

WITNESS	DIRECT	CROSS	REDIRECT	RECROSS
BERNARD J. CANTOR	463	531		

E X H I B I T S

DEFENDANT'S	DESCRIPTION	FOR ID	IN EV
P-A	Photograph		461
P-B	Photograph		461
P-C	Photograph		462
P-D	Photograph		462
P-E	Photograph		462
Q	Deposition of John Lopez		462
R	Deposition of Albert F. Shields		462
S	Sketch.		492
T	Chart.		500
U, U-A, U-B	Three photographs	502	505
Z	Blank of a box		506

Note: There are no Exhibits V, W, X & Y.

* * *

JUDGMENT ORDER
(Filed February 20, 1974)

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

----------x

KOPPERS COMPANY, INC. and UNIVERSAL CORRUGATED BOX MACHINERY CORPORATION,

70 C 926

Plaintiffs,

v.

S&S CORRUGATED PAPER MACHINERY CO., INC.,

Defendant.

----------x

This action having come for trial before the Court, and the Court having received and considered the evidence and briefs of counsel, and having on November 28, 1973 entered its Memorandum Decision containing its findings of fact and conclusions of law it is hereby ORDERED, ADJUDGED, AND DECREED:

1) This Court has jurisdiction over the subject matter of the litigation and of the parties.

2) Defendant is the owner of the entire right to title and interest of United States Patent No. 2,988,236 which issued to Albert F. Shields on January 13, 1961, and which is entitled "Blank Stacking, Straightening

and Delivery Device."

3) Claim 1 of United States Patent No. 2,988,236 is invalid under 35 United States Code Section 103 for obviousness.

4) Neither of the plaintiffs nor their customers has infringed defendant's United States Patent No. 2,988,236 because of the manufacture, sale, and/or use of plaintiffs' Universal Understackers.

5) Defendant's counterclaim for infringement of its United States Patent No. 2,988,236 is hereby dismissed.

6) Plaintiffs are entitled to the relief requested in the complaint, and an injunction in accordance with the terms of the stipulation between the parties placed in the record of this case. Accordingly, defendant and all persons in active concert with defendant are enjoined from asserting the patent in suit in any manner against plaintiffs or their customers in respect to the manufacture, use, or sale of plaintiffs' Universal Understacker.

Judgment Order

7) That plaintiffs shall recover their costs and taxable disbursements from defendant.

Date: February 19, 1974

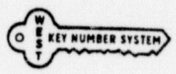
s/ Mark A. Costantino

Mark A. Costantino
United States District Judge

OPINION (Dated November 28, 1973) 609a

crime was not a search or seizure contemplated by the Fourth Amendment and that the subsequent examination of its contents at the station house by way of inventory was not prohibited thereby.

The application of petitioner for the writ of habeas corpus is therefore denied.



KOPPERS COMPANY, INC. and Universal Corrugated Box Machinery Corporation, Plaintiffs,

v.

S & S CORRUGATED PAPER MACHINERY CO., INC., Defendant.

No. 70 C 926.

United States District Court,
E. D. New York.
Nov. 28, 1973.

Action for declaratory judgment that patent No. 2,988,236 for apparatus for accumulating, straightening and delivering box blanks issuing from another machine was invalid and not infringed, wherein patent holder counterclaimed charging plaintiffs with infringement. The District Court, Costantino, J., held that the patent was invalid as anticipated by prior art and as obvious and was not infringed.

Judgment accordingly.

1. **Patents ⇐168(1)**

Invention is to be construed not only in light of claims made, but also with reference to file wrapper or prosecution history in patent office.

2. **Patents ⇐168(2¼)**

Claims which are allowed should be read and interpreted with reference to those which are rejected and to state of prior art; and claims that have been narrowed in order to obtain issuance of patent by distinguishing prior art cannot be broadened to cover that which was previously by limitation eliminated from the patent.

3. **Patents ⇐168(2¼)**

Where applicant for patent accepted reduction of subject matter of patent to include only one particular element, applicant would not be allowed, after obtaining patent, to enlarge claim to cover that which had been previously eliminated by amendment.

4. **Patents ⇐328(2)**

Patent No. 2,988,236 for apparatus for accumulating, straightening and delivering box blanks issuing from another machine was invalid as anticipated by prior art and for obviousness and was not infringed. 35 U.S.C.A. §§ 103, 112, 282.

5. **Patents ⇐36.02(7), 112.1**

In view of strong evidence showing that invention was obvious, neither presumption of validity nor showing of commercial success could render patent valid. 35 U.S.C.A. § 282.

6. **Patents ⇐36.2(2)**

Evidence of commercial success should be considered only where question of obviousness is close. 35 U.S.C.A. § 282.

7. **Patents ⇐241**

Similarity or even identity of result does not establish infringement.

8. **Patents ⇐226.7**

Functional analysis of two machines is inappropriate in determining issue of patent infringement and issue should be resolved on basis of mechanical means employed by devices being compared.

Wyatt, Gerber, Shoup by Douglas W. Wyatt, New York City, for plaintiffs.

Ostrolenk, Faber, Gerb & Soffen by Sidney Faber and Jerome M. Berliner, New York City, for defendant.

MEMORANDUM

COSTANTINO, District Judge.

Koppers Company, Inc. and Universal Corrugated Box Machinery Corporation commenced this action on July 24, 1970 for a declaratory judgment that United States Letters Patent No. 2,988,236 issued June 13, 1961 to A. F. Shields for an invention entitled "Blank Stacking, Straightening and Delivery Device" [hereinafter referred to as Shields Patent] and assigned to defendant, S & S Corrugated Paper Machinery Co., Inc. is invalid and not infringed. Defendant counterclaimed, charging plaintiffs with infringement of its patent.

Upon agreement of all the parties, the following stipulations have been placed into the record:

(1) The only issues to be tried are the questions of validity, infringement, and enforceability of claim one of the patent in suit.

(2) In the event that the suit patent is held invalid and/or not infringed as to claim one thereof, plaintiffs are entitled to an injunction restraining defendant and all persons in active concert with defendant from asserting the patent in suit in any manner against plaintiffs or their customers in respect to the manufacture, use or sale of plaintiffs' understacking machine [hereinafter referred to as the Universal Understacker].

The court has subject matter jurisdiction pursuant to sections 2201, 2202 and 1338 of title 28 of the United States Code and venue is properly laid in this court under section 1400(b) of title 28 of the United States Code.

Validity

The subject of the Shields Patent is an apparatus for accumulating, straightening and delivering box blanks issuing from another machine, which can be operated in synchronism with the issuing machine. Claim One of the Shields Patent reads as follows:

A stacking, straightening and delivery mechanism adopted for use with a machine for operating on box blanks, comprising, a conveyor operable in synchronism with the said machine to move said blanks in a first, or longitudinal, direction, a device above the conveyor to intercept and accumulate blanks issuing from the machine thereby forming a blank stack being fed from below, said device including a pair of plates transverse to the direction of motion of the blanks between which the blanks may be accumulated; one of the said plates abutting the trailing edge of the blanks in the stack and being periodically reciprocally movable in a longitudinal direction, a device above the conveyor to intercept and accumulate blanks issuing from the machine thereby forming a blank stack being fed from below, said device including a pair of plates transverse to the direction of motion of the blanks between which the blanks may be accumulated; one of the said plates abutting the trailing edge of the blanks in the stack and being periodically reciprocally movable in a longitudinal direction to apply a straightening force to the blanks; an opening under said plate sufficient to permit the entry of at least one blank at a time, and above the upper end of said plates, a longitudinally movable plate for periodically pushing a top portion of the stack of said blanks from the said accumulating device and means for supporting the said pusher plate so that it remains in a substantially vertical position when in contact with the said blank stack, said pusher plate being mounted for limited vertical movement relative to the means for supporting the pusher plate, said stack being fed with blanks as the movable plate is removing said top portion from the stack.

Viewed in the context of this proceeding the important features of defendant's patented device are its "novel" pusher and the synchronous movement of its elements. Synchronization is ob-

tained by coordinating all elements with the device's sole source of power—a gear driven by the issuing machine. This is accomplished by utilizing an integrated system of belts which connect all elements to the drive gear.

The specifications contained in the Shields Patent provide the following explanation of the pusher:

> The pusher plate, which operates in a predetermined synchronization with the stacking and straightening device in order to periodically deliver a stack containing a given number of blanks, is vertically slidable by means of wheels . . ., mounted to [the] pusher plate . . . which are adapted to ride on vertical rails . . . mounted to [the] support plate. . . . Thus, as [the] pusher plate delivers a pile of blanks from the machine, the stack is continually rising and because of . . . wheels riding on . . . rails the pusher plate is made to rise in response to the movements of the top of the portion of the stack not being delivered. Thus the pusher plate does not interfere with the increasing stack even during the delivery period.

The supporting plate of the pusher is mounted to two chains which provide means for driving the pusher plate and for sustaining it in a substantially vertical position throughout its operation. Power is provided to the pusher through the interaction of a series of gears coordinated with the drive gear. The gears, each of which comprise a different ratio, provide means for selecting the speed at which the pusher plate is to move. They are secured to a shaft which engages a series of sprocket wheels connected to the two chains. Once the drive gear is activated the chains are put in motion. The chains will continue to move as long as the drive gear is operating. Consequently, while the defendant's apparatus is in operation, the pusher mechanism continually moves through its path; only its speed is subject to change.

It cannot be denied that all elements of defendant's patented device are well known mechanical expedients. The defendant has not seriously disputed this conclusion, but rather has urged that Claim One is a patentable combination that was novel, useful and non-obvious at the time the Shields patent was obtained.

Even if it is assumed that defendant's invention was novel and useful, a question remains as to whether the combination of elements manifested by Claim One meets the statutory standard of non-obviousness, 35 U.S.C. § 103 (1971); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., Inc., 396 U.S. 57, 90 S.Ct. 305, 24 L.Ed.2d 258 (1969); Graham v. John Deere Co., 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545 (1965); Cuno Eng'r Corp. v. Automatic Devices Corp., 314 U.S. 84, 62 S.Ct. 37, 86 L.Ed. 58 (1941); General Radio Co. v. Kepco, Inc., 435 F.2d 135 (2d Cir. 1970); Continental Can Co., Inc. v. Old Dominion Box Co., Inc., 393 F.2d 321 (2d Cir. 1968); Dempster Bros., Inc. v. Buffalo Metal Container Corp., 352 F.2d 420 (2d Cir. 1965); Zoomar, Inc. v. Paillard Products, Inc., 258 F.2d 527 (2d Cir. 1958).

Section 103 of the Patent Act sets forth the following standard:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the difference between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which such subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Addressing itself to the problems posed by section 103 the Supreme Court in Graham v. John Deere Co., 383 U.S.

1, 86 S.Ct. 684, 15 L.Ed.2d 545 (1965), offered the following guidance:

> While the ultimate question of patent validity is one of law . . . the § 103 condition, which is but one of three conditions, each of which must be satisfied, lends itself to several basic factual inquiries. Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy. *Id.* at 17–18, 86 S.Ct. at 694.

In an attempt to prove that Claim One was obvious the plaintiffs have offered into evidence twenty-three prior art references. Sixteen of these references were also cited by the Examiner and are included in the file wrapper of the patent suit. The defendant has countered by arguing that the prior art did not anticipate its invention as none of the prior art references cited by either the Patent Office Examiner or the plaintiffs indicate an apparatus combining all elements found in Claim One. Moreover, the defendant asserts that most of the prior art offered into evidence is irrelevant in that it applies to fields unrelated to the art of "corrugated box machine making."

Defendant's position is untenable. First, the prior art references in evidence, especially those cited in the file wrapper of the patent suit, preclude the defendant from claiming a combination patent. Second, the defendant urges an unnecessarily restrictive standard for determining the relevant prior art.

[1, 2] The prior art references cited by the Examiner are of major importance in this proceeding because in the course of obtaining its patent the patentee when confronted by the prior art was forced to accept certain limitations. It has long been settled that an invention is to be construed not only in light of the claims made, but also with reference to the file wrapper or prosecution history in the Patent Office. Graham v. John Deere Co., *supra* at 33, 86 S.Ct. 684; Schriber-Schroth Co. v. Cleveland Trust Co., 311 U.S. 211, 220–221, 61 S. Ct. 235, 85 L.Ed. 132 (1940). The claims which are allowed should be read and interpreted with reference to those which are rejected and to the state of the prior art; and claims that have been narrowed in order to obtain the issuance of a patent by distinguishing the prior art cannot be broadened to cover that which was previously by limitation eliminated from the patent. Graham v. John Deere Co., *supra*; Schriber-Schroth Co. v. Cleveland Trust Co., *supra*.

Reference to the file wrapper history of Claim One indicates that the patentee accepted severe limitations on the scope of the patent granted. The file wrapper reveals that Claim One had been rejected four times prior to being allowed. In its original form Claim One merely described the various devices employed in defendant's apparatus. The claim was rejected for being indefinite. Shortly thereafter the patentee resubmitted the claim in substantially the same form. The Examiner again rejected the claim "as being drawn to a device, the operation of which is inadequately disclosed." In addition, the Examiner found that the device was unpatentable in view of the prior art. The Examiner's findings made clear that in light of Greenwood's patent No. 1,868,384, which shows a box blank stacker that operates in the same manner as defendant's apparatus, together with Binkard's patent No. 478,079 or Taylor's patent No. 739,121, both of which show the use of a jogger as a straightening device, and Hess' patent No. 2,591,259 or Chandler's patent

No. 2,672,079, both of which show the use of ejectors, no patentable combination had been made.

The Examiner took the view that in light of the disclosures found in the prior art,

> no invention would be involved in making Greenwood's plate 19 capable of oscillatory movement as shown by either Taylor or Binkard, nor would invention be involved in providing Greenwood's device with an ejector as shown by either Hess or Chandler. All of these expedients are within the skill of the average mechanic and would not produce any new or unobvious results.

Shortly after the second rejection, Claim One was resubmitted without any significant change. In its application the patentee argued that the prior art did not anticipate his invention.

> [N]either the Taylor or Binkard oscillatory members can be combined with the Greenwood device so as to produce an oscillable plate suitable for a high speed stacking and straightening device as set forth in the claims . . . .
>
> The ejection means of both the Hess and Chandler patents are operated intermittently thereby making them totally unsuited for a high speed stacking device such as illustrated in the instant application. That is, a member operated intermittently under conditions of high impact loading will soon fail. Further, neither the Hess nor the Chandler ejector means is constructed so as not to interfere with the stack which is rising even as the ejecting operation is taking place. None of the other limitations relative to the pusher plate are taught or remotely suggested by the reference.

The Examiner, however, remained unpersuaded and rejected Claim One for the third time. In his remarks he made it quite clear that the basis for the rejection was that the combination of old elements did not involve any "inventive skill" as each of the mechanisms therein were "within the skill of the average mechanic and [did] not produce any new or unobvious results."

Soon thereafter the patentee once again submitted Claim One to the Patent Office. No changes were made; instead the patentee once again proffered lengthy arguments as to the non-obviousness of its invention. The Examiner refused to change his prior findings and thus made a final rejection of Claim One. In his statement the Examiner expressed the view that Claim One was indefinite in that it did not point out and distinctly claim the subject matter of the invention in accordance with 35 U.S.C. § 112 (1971).

> It is not evident from the defined combination what cooperative or useful function the contact of the pusher has with the blank stack. The novelty of the invention appears to reside in the vertically movable pusher plate so that the blanks can continuously accumulate while the pusher plate is removing a top portion of the stack.

Instead of appealing the Examiner's final rejection, as it had a right to do, the patentee decided to submit an amended claim. The amendment consisted of adding the following phrase to the end of Claim One:

> [S]aid pusher plate being mounted for limited vertical movement relative to the means for supporting the pusher plate, said stack being fed with blanks as the movable plate is removing said top portion from the stack.

In addition the fifth application contained the following remarks:

> [T]hese claims have been amended to recite that blanks are being fed to the stack while the top portion of the stack is being removed by the pusher plate. This is accomplished by mounting the pusher plate for a limited vertical movement relative to the means for supporting the pusher plate. This limitation is not taught or suggested by any of the references cited during the course of prosecution. It is submitted that [Claim One]

. . ., as amended, now [points] out and distinctly claims the subject matter of applicant's invention in accordance with 35 U.S.C. 112.

The Examiner then allowed Claim One of the patent suit.

In light of the above history it is clear that the defendant should be precluded from asserting a combination patent. Rather the scope of the invention should be limited to the pusher element. This result is warranted by reason of the doctrine of file wrapper estoppel or in the alternative by reason of the prior art references proffered to the court.

[3] Referring to the rejected versions of Claim One and that which was allowed, it is clear that the subject matter of the patent had been reduced to include only the pusher element. Graham v. John Deere Co., *supra;* International Latex Corp. v. Warner Bros. Co., 276 F. 2d 557 (2d Cir. 1960). Having accepted this limitation, the defendant should not be allowed to enlarge its claim to cover that which had been previously eliminated by amendment. International Latex Corp. v. Warner Bros. Co., *supra*; C–Thru Products, Inc. v. Uniflex, Inc., 262 F.Supp. 213 (E.D.N.Y.1966).

Furthermore, the extensive disclosures found in all the prior art references in evidence support a finding that the patented device is not a patentable combination of elements. Initially the court finds that the prior art references are pertinent and relevant to the invention in question. Burgess Cellulose Co. v. Wood Flong Corp., 431 F.2d 505 (2d Cir. 1970); Continental Can Co., Inc. v. Old Dominion Box Co., Inc., 393 F.2d 321 (2d Cir. 1968) (Bartels, J.); Application of Shaffer, 229 F.2d 476, 43 C.C.P.A. 758 (C.C.P.A.1956); C–Thru Products, Inc. v. Uniflex, Inc., 262 F.Supp. 213 (E.D.N.Y.1966). Each one of the references disclose the use of a mechanical structure or expedient found in the patented device. The combined effect of the references is to illustrate that all the expedients found in defendant's apparatus were well known and common to many dissimilar fields. Clearly then, a person skilled in the art of making and designing machinery for handling box blanks reasonably could be expected to have looked to the references for a solution of the problems the patented device attempts to solve. Burgess Cellulose Co. v. Wood Flong Corp., *supra*; Welsh Mfg. Co. v. Sunware Products Co., 236 F.2d 225 (2d Cir. 1956); Zoomar, Inc. v. Paillard Products, Inc., 152 F.Supp. 328 (S.D.N.Y.1957).

The evidence concerning the level of the ordinary skill of a person in the art of designing and constructing machinery for handling box blanks shows that it is quite high. Characteristically a person skilled in the art has an engineering degree, has attended graduate school, and has worked in the field for many years. Consequently, in view of the disclosures found in the prior art and the high level of skill in the art of designing and constructing machinery for the handling of box blanks the court concludes that defendant's device was not a patentable combination of elements.

The court has had the opportunity to study prior art references which were not considered by the Examiner. When these additional references are combined with those cited by the Examiner, it becomes quite clear that the pusher element of defendant's device was likewise an expedient within the skill of the average mechanic.

With regard to the pusher element the relevant prior art is as follows: Hess' patent No. 2,591,259; Hart's patent No. 1,344,034; Chandler's patent No. 2,672,079; Sheppard's patent No. 2,135,773; Crank's patent No. 2,607,283; and Kottman's patent No. 2,631,716. The Hess, Hart and Chandler patents, all of which were cited by the Examiner, illustrate the use of a pusher plate to remove objects from a stack. The Hess patent, issued for a billet heating furnace, discloses a device which pushes billets from the top of a rising stack of billets onto a sloping ramp. The Hart patent, issued for a mechanism to be used

for stacking shoe-soles or shoe-lifts as they are issued from a die press, discloses the use of a pushing member to remove a given number of items from the top portion of a rising stack. Similarly the Chandler patent, issued for an article handling and stacking machine, discloses the use of a pusher mechanism for removing a stack of objects.

The Sheppard patent, issued for a mechanical loader for loose materials, which was not included in the file wrapper history of the patent suit, discloses the use of a set of chains as a means of supporting a movable pusher plate. The structure is almost identical with that employed in the patented device.

[4] Finally, the Crank and Kottman patents, which also were not cited by the Examiner, disclose mechanisms that employ pusher plates that are vertically movable on their support plates in order to allow the pusher plate to move up or down in relation to its underlying surface as it moves in a relatively longitudinal direction. Although these patents were issued for a mechanism used in popping corn and a mechanism used to convey loaves of bread through a cutting machine, they are relevant to the invention in question in that they show that the structure of defendant's "novel" pusher plate was commonly used in other fields. This evidence is important in light of the uncontroverted testimony of plaintiffs' expert witness that "the idea of using one plate in front of another plate loosely is a well known obvious expedient." Trial transcript at 257.

It is settled law that

> where the use of a device or structure is common to many dissimilar fields, its application to a new field ordinarily involves no more than ordinary mechanical skill. Welsh Mfg. Co. v. Sunware Products Co., 236 F.2d 225, 226 (2d Cir. 1956).

Consequently, on the basis of the disclosures in the prior art and the evidence showing that the expedients used in defendant's pusher mechanism were commonly used in other fields, the court finds that its invention was anticipated by the prior art and that it would have been obvious to a person having ordinary skill in the art of designing and constructing machinery for handling box blanks. Anderson's-Black Rock, Inc. v. Pavement Salvage Co., Inc., *supra*; Cuno Eng'r Corp. v. Automatic Devices Corp., *supra*; Lemelson v. Topper Corp., 450 F.2d 845 (2d Cir. 1971); Dempster Bros., Inc. v. Buffalo Metal Container Corp., *supra*; Tatko Bros. Slate Co., Inc. v. Hannon, 270 F.2d 571 (2d Cir. 1959); Zoomar, Inc. v. Paillard Products, Inc., *supra*; Bostitch, Inc. v. Precision Staple Corp., 178 F.2d 332 (2d Cir. 1949).

[5, 6] The defendant places great weight on the presumption of validity attached by statute to a duly issued patent, 35 U.S.C. § 282 (1971), and the allegedly great commercial success of its invention. Faced with the strong evidence showing that the invention in question was obvious, neither the presumption of validity nor a showing of commercial success can generate enough force to breathe life into defendant's patent. The plaintiffs have clearly sustained their burden of proof. Formal Fashions, Inc. v. Braiman Bows, Inc., 369 F.2d 536, 539 (2d Cir. 1966); Lorenz v. F. W. Woolworth Co., 305 F.2d 102, 105–106 (2d Cir. 1962). Furthermore it must be realized that evidence of commercial success is only a secondary consideration which should be considered where the question of obviousness is close. Under the circumstances of this case, evidence of commercial success has little import. Graham v. John Deere Co., *supra*, 383 U.S. at 17–18, 86 S.Ct. 684; Continental Can Co., Inc. v. Old Dominion Box Co., Inc., *supra*, 393 F. 2d at 326.

Infringement

[7] The defendant also claims that plaintiffs' Universal Understacker infringes upon Claim One of the Shields Patent. Assuming that Claim One was valid the question of infringement depends upon whether, when Claim One is interpreted so as to cover what is pat-

entably new in light of the specifications and the prior art, the Universal Understacker does substantially the same thing in substantially the same way. Similarity or even identity of result does not approach the quantum of evidence necessary to establish a claim of infringement. Wabash Corp. v. Ross Electric Corp., 187 F.2d 577 (2d Cir. 1951); Moto-Mower Co. v. E.C. Stearns & Co., 126 F.2d 854 (2d Cir. 1942). In the words of Judge Learned Hand:

> A patentee may indeed monopolize all the uses of his invention, but we must first learn what that invention is. It is not the idea in vacuo; the consideration for a grant is a chart which others can follow, not an intimation they must work out for themselves. If they embody the idea by quite different means, they will pay him no tribute; he gets his reward for marking the path, not for pointing to the goal. Grubman Eng'r & Mfg. Co. v. Goldberger, 47 F.2d 151, 153 (2d Cir. 1931).

Therefore, resolution of the issue of infringement will of necessity require a factual inquiry into and comparison of the mechanical means and expedients employed be the devices in question. The Universal Understacker is an underfed "inline squarer and bundle ejector" used for handling box blanks. Similar to defendant's apparatus the Universal machine employs a conveyor to feed blanks into an accumulating mechanism; its accumulating mechanism consists of two transverse plates, one of which operates as a straightening device; and it has a pusher plate which engages a top portion of stacks. Essentially defendant's claim of infringement rests upon these similarities. However, contrary to what the defendant may argue, a comparison of the two machines, their structural design and the manner in which they operate, gives rise to a finding that although they may perform similar functions they do it by quite different means.

Plaintiffs' conveyor system and accumulating devices are essentially the same as those employed in the patented apparatus, the difference being that the Universal Understacker employs a pivoting slapper while the patented apparatus has a slapper which is directly mounted to eccentrics.

However, the pusher mechanism of the two machines are dissimilar in both design and manner of operation. The pusher element in the Universal Understacker is mounted to an air operated piston system. The piston is activated by means of electrical impulses emitted from a photo-electric counter mechanism. Under this system the pusher remains inoperative until a certain predetermined number of box blanks passes before the photo-electric eye of the counter mechanism.

The forward stroke of the Universal pusher is rapid, and thus does not engage the top portion of the stack while blanks are entering it from below. Additionally, the Universal pusher does not effect the removal of the bundle of box blanks but rather displaces the bundle approximately five inches so that the blanks are engaged by a series of vertical drive rollers which then pull the displaced blanks off the stack. It is the combined operation of the rollers and pusher mechanism which remove the blanks from the top of the stack.

Comparing the two devices the following distinguishing features are discerned. The Universal Understacker does not have the synchronous movement of all its elements. The operation of its ejector-removal system is independent of the movement of the conveyor and straightening mechanism of the machine. Second, the Universal pusher mechanism is not designed to be in continuous movement but rather is designed for intermittent operation. Third, the number of blanks removed from the top portion of the stacks in the Universal machine is not controlled by the speed of the pusher or the speed of the conveyor. The velocity of the stroke of the pusher is constant and operates independently from the conveyor. The number of blanks removed is determined by means

of the photo-electric counter system. Finally, the Universal Understacker utilizes a series of vertical drive rollers to effect the removal of the bundle of box blanks from the stack. Its pusher mechanism does not move across the total distance of the stack, but merely displaces the bundle for a distance of approximately five inches.

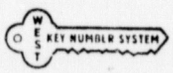
With these differences in mind the court must now inquire into the breadth of defendant's patent. In so doing reference must be made to the specifications, the prior art and the file wrapper history of the patent suit. International Latex Corp. v. Warner Bros. Co., *supra*. A patentee should never be allowed to recapture that which he surrendered by amendments. Exhibit Supply Co. v. Ace Patents Corp., 315 U.S. 126, 62 S.Ct. 513, 86 L.Ed. 736 (1942). Similarly a patentee should not be permitted to claim that which was already disclosed in the prior art. Moto-Mower Co. v. E. C. Stearns & Co., *supra*, 126 F.2d at 855–856.

[8] To prove his action for infringement the defendant has relied heavily upon the similar functions performed by the two machines. A functional analysis of the two machines, however, is inappropriate. Rather the issue of infringement should be resolved on the basis of the mechanical means employed by the devices being compared. Continental Paper Bag Co. v. Eastern Paper Bag Co., 210 U.S. 405, 419–422, 28 S.Ct. 748, 52 L.Ed. 1122 (1908).

The defendant also relies upon the doctrine of equivalents and urges that though the Universal Understacker may employ different means, the differences are so insignificant as to require that the means employed in the Universal Understacker should be treated as the equivalents of those employed in the patented device. However, reference to the structural design of the two machines and the manner in which they perform their tasks discloses that there are significant differences between the two machines. In light of the file wrapper history and the state of the prior art at the time the patent was issued the court would be hard put to hold that the different means employed by the Universal machine were equivalent to those employed in Claim One of the patent suit. At best defendant's invention was extremely narrow. His position was not enhanced by the difficulties he encountered in the process of obtaining the patent. Consequently, the court holds that the Universal Understacker, which employs a complicated ejector-removal system, does not infringe upon Claim One of the Shields Patent. The Triax Co. v. Hartman Metal Fabricators, Inc., 479 F.2d 951 (Decided May 31, 1973, 2d Cir.); International Latex Corp. v. Warner Bros. Co., *supra*, 276 F.2d at 563–565.

The foregoing opinion shall constitute the court's findings of fact and conclusions of law, as required by Fed.R.Civ.P. 52(a).

Settle judgment on notice.



Leonard R. KAHN, Plaintiff,

v.

DYNAMICS CORPORATION OF AMERICA, Defendant.

No. 69 Civ. 2783 (CHT).

United States District Court,
S. D. New York.
Sept. 14, 1973.

Suit for alleged infringement of patent. The District Court, Tenney, J., held that patent No. 3,030,503 relating to an alleged improvement in field of diversity receiving systems was invalid in view of prior art, but even if valid, was not infringed, where claims of patent were limited to ratio-squared combining, whereas defendant's diversity systems related their signals to greater exponential powers than the square, and that

U.S. COURT OF APPEALS:SECOND CIRCUIT

Index No.

KOPPERS CO., et al,
Plaintiffs-Appellees,

against

S&S CORRUGATED PAPER MACHINERY CO.,
Defendant-Appellant.

Affidavit of Personal Service

STATE OF NEW YORK, COUNTY OF NEW YORK *ss.:*

I, Victor Ortega, *being duly sworn,*

deposes and says that deponent is not a party to the action, is over 18 years of age and resides at

1027 Avenue St. John, Bronx, New York

That on the 25th *day of* June *1974 at* 230 Park Avenue, New York

deponent served the annexed Appellant's Appendix *upon*

Wyatt, Gerber & Shoup-Attorneys for Appellees

the *in this action by delivering a true copy thereof to said individual personally. Deponent knew the person so served to be the person mentioned and described in said papers as the* Attorney(s) *herein,*

Victor Ortega

Print name beneath signature

Sworn to before me, this 25th *day of* June *19* 74

VICTOR ORTEGA

Robert T. Brin

ROBERT T. BRIN
NOTARY PUBLIC, STATE OF NEW YORK
NO. 31 - 0418950
QUALIFIED IN NEW YORK COUNTY
COMMISSION EXPIRES MARCH 30, 1975